

CALIFORNIA
AGRICULTURAL EXTENSION SERVICE
CIRCULAR 24

January, 1929

Enterprise Efficiency Studies
on California Farms
A Progress Report

L. W. FLUHARTY and F. R. WILCOX

PUBLISHED BY
THE COLLEGE OF AGRICULTURE
UNIVERSITY OF CALIFORNIA

Coöperative Extension work in Agriculture and Home Economics, College of Agriculture, University of California, and United States Department of Agriculture coöperating. Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. B. H. Crocheron, Director, California Agricultural Extension Service.

UNIVERSITY OF CALIFORNIA PRINTING OFFICE
BERKELEY, CALIFORNIA

1929

FOREWORD

The farmers of California realize that farm efficiency is a prerequisite to any real solution of the farm problem. Volume of production per unit of area, cost of production per unit of product, quality of product, and efficiency of marketing, all go hand in hand to make up the economic return of the farmer.

This circular presents some of the results of the large study of farm enterprises now under way in California. Most farmers keep some sort of account. The value of such accounts is vastly enhanced, however, when they are kept upon a uniform basis, when they are analyzed and segregated, and when they are compared with the records of neighboring farmers or competing districts.

Much of the public discussion regarding the records given in this circular has been concerned with the average costs or returns per acre or per unit. Such averages are, however, the least valuable aspect of the work. The meat of the matter is for the farmer to be able to compare his detailed costs with those of others operating under similar conditions, and, by such comparison, to learn wherein his business may be improved through lowering costs or increasing yields.

Every farm enterprise is made up of a series of small operations. A failure in efficiency in one or more of these operations may increase the total cost or lower the final yield. It is only by comparison between the detailed operations of various farms and groups of farms that a view may be gained of their comparative efficiency.

Limitation of space prohibits the presentation here of the segregations and comparisons made upon the seventy-four studies given in this circular. However, examples are presented of some tabulations with apples (page 68), oranges (page 70), walnuts (page 72), dairying (page 75), and poultry (page 78). Special attention is called to these pages. The farm advisors in the various counties have prepared detailed tabulations bearing upon all the studies under their charge.

B. H. CROCHERON,

Director of Agricultural Extension.

LIST OF TABLES

Table 1. Extent of enterprise efficiency studies in California	PAGE 8
--	-----------

DECIDUOUS FRUITS

Table 2. Apple cost account data, Santa Cruz County—1927	12
Table 3. Gravenstein apple cost account data, Sonoma County—1927.....	13
Table 4. Late apple cost account data, Sonoma County—1927	14
Table 5. Apricot cost account data, Alameda County—1927.....	15
Table 6. Apricot cost account data, Riverside County—1926.....	16
Table 7. Apricot cost account data, Stanislaus County—1927	17
Table 8. Thompson grapes (all sold dried) cost account data, Fresno County—1926-1927	18
Table 9. Thompson grapes (sold fresh and dried) cost account data, Fresno County—1926-1927	19
Table 10. Thompson grapes (all sold fresh) cost account data, Fresno County—1926-1927	20
Table 11. Muscat grapes (all sold dried) cost account data, Fresno County—1926-1927	21
Table 12. Muscat grapes (sold fresh and dried) cost account data, Fresno County—1926-1927	22
Table 13. Muscat grapes (all sold fresh) cost account data, Fresno County—1926-1927	23
Table 14. Malaga grapes cost account data, Fresno County—1926-1927.....	24
Table 15. Emperor grapes cost account data, Fresno County—1926-1927....	25
Table 16. Cornichon grapes cost account data, Fresno County—1926-1927.	26
Table 17. Juice grapes cost account data, Fresno County—1926-1927.....	27
Table 18. Tokay grapes cost account data, San Joaquin County—1926-1927.	28
Table 19. Raisin cost account data, Tulare County—1927	29
Table 20. Peach cost account data, Stanislaus County—1925-1927.....	30
Table 21. Peach cost account data, Tulare County—1926-1927.....	31
Table 22. Pear cost account data, Lake County—1926-1927.....	32
Table 23. Pear cost account data, Mendocino County—1926-1927.....	33
Table 24. Prune cost account data, Napa County—1927	34

CITRUS FRUITS

Table 25. Grapefruit cost account data, Imperial County—1927.....	35
Table 26. Lemon cost account data, Orange County—1926-1927.....	36
Table 27. Orange cost account data, Orange County—1926-1927	37

NUT CROPS

Table 28. Walnut cost account data, Los Angeles County—1927.....	38
Table 29. Walnut cost account data, San Joaquin County—1926-1927.....	39
Table 30. Walnut cost account data, Santa Barbara County—1926-1927....	40

FIELD CROPS

	PAGE
Table 31. Alfalfa cost account data, Merced County—1927	41
Table 32. Bean cost account data, Santa Barbara County—1927	42
Table 33. Cotton cost account data, Kern County—1926-1927	43
Table 34. Potato cost account data, Kern County—1927	44
Table 35. Wheat cost account data, San Luis Obispo County—1927	45
Table 36. Summer fallow cost account data on grain land, San Luis Obispo County—1927	46

DAIRY

Table 37. Dairy cost account data, Imperial County—1926-1927	47
Table 38. Dairy cost account data, Kern County—1927	48
Table 39. Dairy cost account data, Marin County—1925-1927	49
Table 40. Dairy cost account data, Riverside County—1927	50
Table 41. Dairy cost account data, San Bernardino County—1927	51

POULTRY

Table 42. Poultry cost account data, Fresno County—1925-1927	52
Table 43. Poultry cost account data, Humboldt County—1927	53
Table 44. Poultry cost account data, Imperial County—1927	54
Table 45. Poultry cost account data, Kern County—1927	55
Table 46. Poultry cost account data, Monterey County—1927	56
Table 47. Poultry cost account data, Napa County—1926-1927	57
Table 48. Poultry cost account data, Orange County—1927	58
Table 49. Poultry cost account data, Placer County—1927	59
Table 50. Poultry cost account data, Sacramento County—1927	60
Table 51. Poultry cost account data, San Joaquin County—1925-1927	61
Table 52. Poultry cost account data, Santa Cruz County—1927	62
Table 53. Poultry cost account data, Sonoma County—1925, 1927	63
Table 54. Poultry cost account data, Tulare County—1926-1927	64
Table 55. Poultry cost account data, Ventura County—1927	65
Table 56. Turkey cost account data, San Bernardino County—1927	66

METHOD OF RETURNING DATA TO COOPERATORS

Table 57. Comparison of cost and efficiency factors in Gravenstein apple production: Sonoma County, 1927. Grouped according to net profit per acre	68
Table 58. Comparison of cost and efficiency factors in orange production: Orange County, 1927. Grouped according to net profit per acre	70
Table 59. Comparison of cost and efficiency factors in producing walnuts: Los Angeles County, 1927. Grouped according to yield per acre	72
Table 60. Extremes of cultivation practices showing four groves for comparison with your grove. Walnut cost account study, Los Angeles County—1927	74
Table 61. Comparison of cost and efficiency factors in the dairy industry: Imperial County, 1927. Grouped according to net profit per cow	75
Table 62. Comparison of cost and efficiency factors in egg production: Sonoma County, 1927. Grouped according to net profit per hen	78

Enterprise Efficiency Studies on California Farms

A Progress Report

L. W. FLUHARTY¹ AND F. R. WILCOX²

INTRODUCTION

Since 1925, farmers of the State of California have been keeping efficiency and cost records on various farm enterprises in cooperation with the Agricultural Extension Service of the University of California. During 1925, 142 farmers located in 5 counties completed records on 3 different commodities. From this small beginning the work has spread to all parts of the state. At the close of the 1927 crop year 74 separate studies were completed, 5 in 1925, 20 in 1926, and 49 in 1927. Records were obtained from 1,713 farmers. These 74 studies were made in 28 counties and included 22 different farm commodities. During 1928 the number of studies has increased to 80 for the same 22 commodities. A total of 1,833 cooperators located in 33 counties are supplying the original data (see table 1).

These studies were organized to continue over a period of five years. Because of the seasonal variation in yields, costs, and returns, it is impossible to draw definite conclusions from data collected over a shorter period of time. The material in this circular is, therefore, presented as a progress report dealing with the 74 enterprise efficiency studies conducted to date.

It is obviously impossible to include in the pages of one small publication all of the efficiency factors involved. There are herein presented only general summaries of costs, returns, and small amounts of other information, together with methods of returning to the individual cooperators results from each type of study. Although the data cover only a period of from one to three years, it is presented as the best and most reliable information obtainable at the present time. It should not, however, be considered as final and conclusive.

The tables presented in this circular show in tabular form the cost of production and efficiency factors involved in the studies carried on throughout the state. These tables fall naturally under six general groups, namely: deciduous fruits, citrus fruits, nut crops, field crops, dairying, and poultry raising. It will be noted that the factors for

¹ Extension Specialist in Farm Management.

² Extension Specialist in Farm Management.

the tree crops and field crops are practically the same and the forms used in tabulating the data are all very similar. The cost and efficiency factors considered in the dairy and poultry studies are very different from those considered in tree and field crops. The last five tables are representative examples of summaries for five of the main groups of cost account studies illustrating the methods of presenting the cost and efficiency data to the cooperators.

METHOD OF CONDUCTING ENTERPRISE EFFICIENCY STUDIES

The enterprise efficiency and cost studies are carried on under the direct supervision of the farm advisors in the various counties of the state. Records are kept on standard forms. The cooperator (farmer) keeps a daily record of labor and cash costs for the enterprise, which record he sends to the farm advisor at the end of each month.

This record includes the number of man, horse, and tractor hours involved in each cultural operation, and the wage rate per hour. When received, the record is checked for errors or omissions by the farm advisor. If errors or omissions occur the farm advisor makes corrections by telephone, letter, or personal call on the cooperator. The material from each individual record is then entered on a monthly accumulation sheet in the farm advisor's office. During the course of the study the farm advisor takes the necessary inventories of land, improvements, and equipment used in the enterprise. In order that the material may be of immediate and practical value, the cost of production and the management factors which influence these costs are worked out for each cooperator at the close of the year. The cost of production and management factors are also compiled for the entire study. The data are so arranged as to show contrasts between cultural methods followed on the most profitable, the average, and the least profitable farms. A comparison is made between these groups and each cooperator's record which enables him to detect management methods that may be improved.

RETURNING INFORMATION TO COOPERATORS

When the enterprise efficiency study has been completed and the data analyzed, a meeting of the cooperators is held. At this meeting each cooperator is given a completed copy of his own record, together with a copy of all other data and conclusions drawn from the entire study. As the meeting proceeds results and conclusions of the study are discussed, so that each cooperator may make comparisons of these results with his own record. Such a comparison enables the cooperator

to find the 'management leaks' in his business. After such a meeting the farm advisor visits each cooperator for the purpose of further interpreting this record and making suggestions for improvement in management or cultural practices. A memorandum of proposed changes is often left with the cooperator.

PURPOSES OF ENTERPRISE EFFICIENCY STUDIES

These studies are carried on primarily for the purpose of aiding the individual cooperator with his management problems. A careful analysis of the summaries enables him to make the following more important uses of the data:

1. As an index to the relative efficiency of his own management practices as compared with all other cooperators who are operating under similar conditions.
2. To compare management practices and the relative profitability of his enterprise with high, low, and average of the district in which he is farming.
3. As a guide for determining the most efficient standards of management.
4. To learn whether or not his costs of production per unit are above or below the current or probable market price.
5. As an index to the relative profitability of his enterprise as compared with the same enterprise in competing sections of the state.
6. As a basis for a more effective enterprise layout and program.

The farm advisor is interested in an effective program for the improvement of agricultural conditions. It is impossible for him to build such a program without a thorough knowledge of the cultural and management problems with which the farmers of the county must deal. The enterprise efficiency and cost studies furnish him a method of studying these problems. From the data secured it is possible to measure the efficiency of various cultural and management practices in money value. The studies also provide a basis upon which the farm advisor may judge the relative importance of various extension projects.

TABLE 1
EXTENT OF ENTERPRISE EFFICIENCY STUDIES IN CALIFORNIA

County	Enterprise	Number of records			
		1925	1926	1927	1928*
Alameda.....	Apricots.....			10	15
	Poultry.....				25
Butte.....	Oranges.....				18
Colusa.....	Prunes.....				24
	Dairy.....				14
Fresno.....	Grapes.....		92	127	100
	Poultry.....		3	7	8
Humboldt.....	Poultry.....			17	22
	Alfalfa.....				12
Imperial.....	Dairy.....		14	16	18
	Grapefruit.....			9	9
	Poultry.....			13	22
	Cotton.....		6	5	17
	Dairy.....			9	15
Kern.....	Potatoes.....			6	15
	Poultry.....			31	23
	Turkeys.....				8
Kings.....	Dairy.....				18
Lake.....	Pears.....		36	31	27
Los Angeles.....	Walnuts.....			40	30
	Poultry.....				40
	Apricots.....				12
Madera.....	Beef cattle.....				16
	Grapes.....			6	22
Marin.....	Dairy.....	8	4	3	9
Mendocino.....	Pears.....		23	28	28
Merced.....	Alfalfa.....		5	15	18
	Dairy.....				22
Monterey.....	Poultry.....			22	24
Napa.....	Poultry.....		14	14	18
	Prunes.....			22	22
	Beans.....				20
	Bees.....				10
Orange.....	Lemons.....		7	12	25
	Oranges.....		35	87	87
	Poultry.....			14	16
Placer.....	Poultry.....			13	17
Riverside.....	Apricots.....		8	9	8
	Dairy.....			4	15
Sacramento.....	Poultry.....			12	26
San Benito.....	Prunes.....				20
	Citrus.....				36
San Bernardino.....	Dairy.....			12	16
	Poultry.....				50
	Turkeys.....			4	12
San Diego.....	Oranges.....				12
	Poultry.....			7	9
	Dairy.....				8
San Joaquin.....	Grapes.....		18	15	22
	Poultry.....	18	21	24	24
	Walnuts.....		12	19	16

* The enterprises included for 1928 are under way. Summaries have not been made. The number of records are estimates based on latest available information from the farm advisors.

TABLE 1—(Continued)

County	Enterprise	Number of records			
		1925	1926	1927	1928*
San Luis Obispo.....	Dairy.....				16
	Wheat.....			15	15
	Summer fallow.....			19	15
Santa Barbara.....	Beans.....			18	20
	Walnuts.....		40	28	24
Santa Cruz.....	* Apples.....			21	30
	Poultry.....			6	30
	Apples†.....			32	30
Sonoma.....	Dairy.....				14
	Poultry‡.....	38	35	58	69
	Prunes.....				15
	Almonds.....				10
	Apricots.....			14	25
Stanislaus.....	Beans.....				34
	Dairy.....				19
	Grain.....				14
	Peaches.....	60	83	81	50
Sutter.....	Poultry.....	18			18
	Peaches.....				24
	Prunes.....				20
Tehama.....	Peaches.....			7	
	Sheep.....				16
	Turkeys.....			8	30
	Dairy.....				18
Tulare.....	Grapes.....			33	24
	Oranges.....				40
	Peaches.....		21	34	24
	Poultry.....		18	28	28
Ventura.....	Poultry.....			11	18
	Walnuts.....				23
Total.....		142	495	1,076	1,833
Number of studies.....		5	20	49	80
Average number of records.....		28.4	24.7	22.0	23.0

* The enterprises included for 1928 are under way. Summaries have not been made. The number of records are estimates based on latest available information from the farm advisors.

† The apple study in Sonoma County includes Gravenstein and late varieties, making two separate reports.

‡ The 1926 poultry study in Sonoma County includes only production records.

EXPLANATION OF TERMS USED IN COST TABLES

In order that the reader may correctly interpret the tables presented in this publication the following explanation of terms is submitted for those items which are not self-explanatory.

1. Terms used in all tables.

Labor: the cost for all family and hired labor. The family labor is computed at the wage rate for which the same class of labor could have been hired. When labor cost items appear in the tables on fruit or field crops the total charge includes man, horse, and tractor labor.

Interest and depreciation on improvements and equipment: this item includes interest on investment at 6 per cent on capital invested in improvements and equipment and an annual depreciation charge based on inventory value. Trees are considered an improvement in the fruit cost account projects.

Interest on investment in land: a charge of 6 per cent on the estimated sale value of bare land for the farms on which the records are kept.

2. Terms used in cost tables on fruit and field crops.

Materials: a cost item which represents materials used in the enterprise.

Cash overhead: a cost which includes taxes, interest on operating capital, and incidental expenses which cannot be charged directly to a cultural operation.

Average income per acre: the total income divided by the number of acres in the group of farms under consideration. The total income is based on farm price of the product, that is, the market price minus cost of marketing.

Average net profit per acre: the difference between total cost and average income per acre.

Average income per ton: the total receipts divided by the total tonnage produced on the farm groups under consideration.

Average net profit per ton: the difference between total income and total expenses per ton.

3. Terms used in cost tables on poultry and dairy data.

Gross income: the cash receipts from dairy or poultry products, the value of these products consumed in the home, and increase in inventory of stock.

Total expense: all cash expenses, family labor, depreciation on buildings and equipment, and interest on investment at 6 per cent.

Net profit: the gross income minus total expense.

Farm income: the net profit, interest on investment at 6 per cent, and the value of the family labor. This figure is the income derived from the enterprise by the operator for his own labor and the use of his capital after a deduction has been made for depreciation on buildings and equipment.

Labor income: the farm income minus interest at 6 per cent on invested capital. This figure represents the amount received by the operator for his own labor.

TABLE 2

APPLE COST ACCOUNT DATA, SANTA CRUZ COUNTY—1927

	1927
Number of records	21
Acres in study	328.7
Total amount produced (tons)	1,895.28
Average yield per acre (tons)	5.77
Highest yield per acre (tons)	13.49
Cost per ton on highest yield (dollars)	14.87
Lowest yield per acre (tons)	1.44
Cost per ton on lowest yield (dollars)	46.51
Average cost per acre	<i>dollars</i>
Labor	83.04
Materials	12.48
Cash overhead	20.52
Interest and depreciation (improvements and equipment)	31.19
Interest on investment in land (at 6 per cent)	19.22
Total	166.45
Average income per acre	209.97
Average net profit per acre	43.52
Average cost per ton	<i>dollars</i>
Labor	14.41
Materials	2.16
Cash overhead	3.55
Interest and depreciation (improvements and equipment)	5.41
Interest on investment in land (at 6 per cent)	3.33
Total	28.86
Average income per ton	36.42
Average net profit per ton	7.56

The above tabulations were compiled from individual cost records kept by farmers in Santa Cruz County under the direction of Paul S. Williamson, Assistant Farm Advisor.

TABLE 3

GRAVENSTEIN APPLE COST ACCOUNT DATA, SONOMA COUNTY—1927

	1927	
Number of records	32	
Acres in study	301.3	
Total amount produced (boxes)	63,876	
Average yield per acre (boxes)	212	
Highest yield per acre (boxes)	666	
Cost per box on highest yield (dollars)	0.29	
Lowest yield per acre (boxes)	25	
Cost per box on lowest yield (dollars)	4.58	
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor		63.72
Materials		10.80
Cash overhead		7.70
Interest and depreciation (improvements and equipment)		48.19
Interest on investment in land (at 6 per cent)		16.45
Total	146.86*	146.86
Average income per acre	172.00	242.31
Average net profit per acre	25.14	95.45
Average cost per box	<i>cents</i>	<i>cents</i>
Labor		30.1
Materials		5.1
Cash overhead		3.6
Interest and depreciation (improvements and equipment)		22.7
Interest on investment in land (at 6 per cent)		7.8
Total	69.3*	69.3
Average income per box	81.1	114.3
Average net profit per box	11.8	45.0

* The 1927 Gravenstein prices were 41 per cent higher than the average for the five previous years. The income figures in this column are based on this five-year-average price. This estimated income was placed on each record in addition to the actual income because it was felt to be a sounder basis for studying each enterprise by the owners.

Based on 1927 income 23 cooperators made a profit; 9 a loss.

Based on the five-year-average income 18 cooperators made a profit; 14 a loss.

The above tabulations were compiled from individual cost records kept by farmers in Sonoma County under the direction of H. P. Everett, Assistant Farm Advisor.

TABLE 4

LATE APPLE COST ACCOUNT DATA, SONOMA COUNTY—1927

	1927
Number of records	9
Aeres in study	39.0
Total amount produced (boxes)	16,887
Average yield per acre (boxes)	433
Highest yield per acre (boxes)	946
Cost per box on highest yield (dollars)	0.25
Lowest yield per acre (boxes)	21
Cost per box on lowest yield (dollars)	5.27
Average cost per acre	<i>dollars</i>
Labor	93.10
Materials	13.42
Cash overhead	9.44
Interest and depreciation (improvements and equipment)	45.91
Interest on investment in land (at 6 per cent)	16.44
Total	178.31
Average income per acre	311.03
Average net profit per acre	132.72
Average cost per box	<i>cents</i>
Labor	21.5
Materials	3.1
Cash overhead	2.2
Interest and depreciation (improvements and equipment)	10.6
Interest on investment in land (at 6 per cent)	3.8
Total	41.2
Average income per box	71.8
Average net profit per box	30.6

The high and the low yields were both obtained on 18-year-old orchards.

The above tabulations were compiled from individual cost records kept by farmers in Sonoma County under the direction of H. P. Everett, Assistant Farm Advisor.

TABLE 5

APRICOT COST ACCOUNT DATA, ALAMEDA COUNTY—1927

	1927
Number of records	10
Acres in study	160.5
Total amount produced (tons)	548.72
Average yield per acre (tons)	3.42
Highest yield per acre (tons)	5.04
Cost per ton on highest yield (dollars)	50.00
Lowest yield per acre (tons)	0.22
Cost per ton on lowest yield (dollars)	408.00
Average cost per acre	<i>dollars</i>
Labor	88.32
Materials	10.76
Cash overhead	14.14
Interest and depreciation (improvements and equipment)	30.03
Interest on investment in land (at 6 per cent)	38.16
Total	181.41
Average income per acre	228.92
Average net profit per acre	47.51
Average cost per ton	<i>dollars</i>
Labor	25.82
Materials	3.15
Cash overhead	4.13
Interest and depreciation (improvements and equipment)	8.78
Interest on investment in land (at 6 per cent)	11.16
Total	53.04
Average income per ton	66.94
Average net profit per ton	13.90

The above tabulations were compiled from individual cost records kept by farmers in Alameda County under the direction of J. Murray Davison, Assistant Farm Advisor.

TABLE 6
APRICOT COST DATA, RIVERSIDE COUNTY—1926

	1926
Number of records	8
Acres in study	83.5
Total amount produced (tons)	385.70
Average yield per acre (tons)	4.62
Highest yield per acre (tons)	13.66
Cost per ton on highest yield (dollars)	18.64
Lowest yield per acre (tons)	2.65
Cost per ton on lowest yield (dollars)	54.78
Average cost per acre	<i>dollars</i>
Labor	88.10
Materials	17.85
Cash overhead	9.44
Interest and depreciation (improvements and equipment)	44.80
Interest on investment in land (at 6 per cent)	20.12
Total	180.31
Average income per acre	237.74
Average net profit per acre	57.43
Average cost per ton	<i>dollars</i>
Labor	19.07
Materials	3.86
Cash overhead	2.04
Interest and depreciation (improvements and equipment)	9.70
Interest on investment in land (at 6 per cent)	4.35
Total	39.02
Average income per ton	51.46
Average net profit per ton	12.44

Material costs are made up largely of water costs with certain miscellaneous supplies. The returns per acre and per ton which are included in the above table are materially increased in several instances by the high price received for pits by growers who dried their fruit.

The above tabulations were compiled from individual cost records kept by farmers in Riverside County under the direction of M. M. Winslow, Farm Advisor.

TABLE 7
APRICOT COST ACCOUNT DATA, STANISLAUS COUNTY—1927

	1927
Number of records	14
Acres in study	98.3
Total amount produced (tons)	352.73
Average yield per acre (tons)	3.59
Highest yield per acre (tons)	16.20
Cost per ton on highest yield (dollars)	22.46
Lowest yield per acre (tons)	0.87
Cost per ton on lowest yield (dollars)	157.33
Average cost per acre	<i>dollars</i>
Labor	89.20
Materials	9.83
Cash overhead	15.57
Interest and depreciation (improvements and equipment, risk,* etc.)	51.70
Interest on investment in land (at 6 per cent)	21.00
Total	187.30
Average income per acre	221.50
Average net profit per acre	34.20
Average cost per ton	<i>dollars</i>
Labor	24.85
Materials	2.74
Cash overhead	4.34
Interest and depreciation (improvements and equipment, risk,* etc.)	14.40
Interest on investment in land (at 6 per cent)	5.85
Total	52.18
Average income per ton	61.70
Average net profit per ton	9.52

This table includes orchards from four years up to twelve years of age.

* The charge itemized as 'risk' was arrived at by taking 15 per cent of all expenses except interest on investment in land. This item amounted to \$20.48 per acre and \$5.57 per ton in 1927.

The above tabulations were compiled from individual cost records kept by farmers in Stanislaus County under the direction of A. A. Jungerman, Farm Advisor.

TABLE 8

THOMPSON GRAPES (ALL SOLD DRIED) COST ACCOUNT DATA, FRESNO
COUNTY—1926-1927

	1926	1927
Number of records	24	20
Acres in study	482.3	305.8
Total amount produced (dried tons).....	824.46	534.90
Average yield per acre (dried tons).....	1.71	1.75
Highest yield per acre (dried tons).....	3.00	3.38
Cost per ton on highest yield (dollars).....	38.50	38.94
Lowest yield per acre (dried tons)	0.90	0.94
Cost per ton on lowest yield (dollars).....	136.37	106.03
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	51.94	53.65
Materials	6.79	6.09
Cash overhead	12.91	14.40
Interest and depreciation (improvements and equipment)....	28.40	28.88
Interest on investment in land (at 6 per cent).....	9.76	9.23
Total	109.80	112.25
Average income per acre .....	.....	.....
Average net profit per acre .....	.....	.....
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	30.37	30.66
Materials	3.97	3.48
Cash overhead	7.54	8.24
Interest and depreciation (improvements and equipment)....	16.62	16.49
Interest on investment in land (at 6 per cent).....	5.71	5.28
Total	64.21	64.15
Average income per ton .....	.....	.....
Average net profit per ton .....	.....	.....

Income and net profit are not reported because complete returns were not available at time of making summary.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 9

THOMPSON GRAPES (SOLD FRESH AND DRIED) COST ACCOUNT DATA, FRESNO COUNTY—1926–1927*

	1926	1927
Number of records	10	9
Acres in study	195.0	246.5
Total amount produced (tons).....	1,374.70	1,895.12
Average yield per acre (tons).....	7.05	7.68
Highest yield per acre (tons).....	10.00	10.40
Cost per ton on highest yield (dollars).....	15.28	14.05
Lowest yield per acre (tons).....	5.08	6.00
Cost per ton on lowest yield (dollars).....	19.68	18.21
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	61.14	61.73
Materials	7.43	8.24
Cash overhead	13.96	16.14
Interest and depreciation (improvements and equipment)....	27.72	28.16
Interest on investment in land (at 6 per cent).....	11.29	10.90
Total	121.54	125.17
Average income per acre .....	.....	.....
Average net profit per acre .....	.....	.....
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	8.67	8.04
Materials	1.05	1.07
Cash overhead	1.99	2.11
Interest and depreciation (improvements and equipment)....	3.93	3.66
Interest on investment in land (at 6 per cent).....	1.60	1.42
Total	17.24	16.30
Average income per ton .....	.....	.....
Average net profit per ton .....	.....	.....

* The report is given on a fresh tonnage basis. That portion of the crop sold as raisins was converted into green tonnage on a 1 to 4 ratio. Income and net profit are not reported because complete returns were not available at time of making summary.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 10

THOMPSON GRAPES (ALL SOLD FRESH) COST ACCOUNT DATA, FRESNO
COUNTY—1926-1927

	1926	1927
Number of records	7	1
Acres in study	26.2	4.0
Total amount produced (tons)	197.90	49.64
Average yield per acre (tons)	7.56	12.41
Highest yield per acre (tons)	8.94	12.41
Cost per ton on highest yield (dollars).....	18.27	14.94
Lowest yield per acre (tons)	6.55	.....
Cost per ton on lowest yield (dollars).....	16.54	.....
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	55.37	101.97
Materials	4.78	9.59
Cash overhead	15.09	8.36
Interest and depreciation (improvements and equipment)....	25.65	53.44
Interest on investment in land (at 6 per cent).....	9.97	12.00
Total	110.86	185.36
Average income per acre .....	.....	.....
Average net profit per acre .....	.....	.....
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	7.32	8.22
Materials	0.63	0.77
Cash overhead	2.00	0.67
Interest and depreciation (improvements and equipment)....	3.40	4.31
Interest on investment in land (at 6 per cent).....	1.32	0.97
Total	14.67	14.94
Average income per ton .....	.....	.....
Average net profit per ton .....	.....	.....

Income and net profit are not reported because complete returns were not available at time of making summary.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 11

MUSCAT GRAPES (ALL SOLD DRIED) COST ACCOUNT DATA, FRESNO COUNTY
1926-1927

	1926	1927
Number of records	9	8
Acres in study	356.2	218.5
Total amount produced (dried tons)	522.50	408.32
Average yield per acre (dried tons)	1.47	1.87
Highest yield per acre (dried tons)	2.78	3.00
Cost per ton on highest yield (dollars)	40.64	37.83
Lowest yield per acre (dried tons)	0.81	0.83
Cost per ton on lowest yield (dollars).....	29.78	98.26
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	44.70	52.09
Materials	2.36	1.99
Cash overhead	12.96	14.80
Interest and depreciation (improvements and equipment)....	29.38	23.69
Interest on investment in land (at 6 per cent).....	9.97	9.43
Total	99.37	102.00
Average income per acre.....	.....	.....
Average net profit per acre .....	.....	.....
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	30.41	27.80
Materials	1.61	1.06
Cash overhead	8.82	7.91
Interest and depreciation (improvements and equipment)....	19.99	12.67
Interest on investment in land (at 6 per cent).....	6.78	5.05
Total	67.61	54.55
Average income per ton .....	.....	.....
Average net profit per ton .....	.....	.....

Because of the various methods of selling and of deferred payments, income figures are not included in this study.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 12

MUSCAT GRAPES (SOLD FRESH AND DRIED) COST ACCOUNT DATA, FRESNO
COUNTY—1926-1927*

	1926	1927
Number of records	7	9
Acres in study	231.5	353.7
Total amount produced (tons).....	1,534.80	3,258.00
Average yield per acre (tons)	6.63	9.20
Highest yield per acre (tons).....	9.45	10.78
Cost per ton on highest yield (dollars)	13.42	10.94
Lowest yield per acre (tons)	3.48	5.60
Cost per ton on lowest yield (dollars)	26.32	18.91
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	49.01	53.11
Materials	3.28	1.73
Cash overhead	13.39	14.98
Interest and depreciation (improvements and equipment)....	19.27	21.62
Interest on investment in land (at 6 per cent)	11.35	10.48
Total	96.30	101.92
Average income per acre .....	.....	.....
Average net profit per acre .....	.....	.....
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	7.39	5.77
Materials	0.49	0.19
Cash overhead	2.02	1.63
Interest and depreciation (improvements and equipment)....	2.91	2.35
Interest on investment in land (at 6 per cent)	1.71	1.14
Total	14.52	11.08
Average income per ton .....	.....	.....
Average net profit per ton .....	.....	.....

* The report is given on a fresh tonnage basis. That portion of the crop sold as raisins was converted to a green tonnage basis on a 1 to 4 ratio. Income and net profit are not reported because complete returns were not available at time of making summary.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 13

MUSCAT GRAPES (ALL SOLD FRESH) COST ACCOUNT DATA, FRESNO COUNTY
1926-1927

	1926	1927
Number of records	7	6
Acres in study	95.8	82.5
Total amount produced (tons)	537.80	639.60
Average yield per acre (tons)	5.61	7.75
Highest yield per acre (tons)	9.67	11.57
Cost per ton on highest yield (dollars)	14.19	9.30
Lowest yield per acre (tons)	1.67	4.35
Cost per ton on lowest yield (dollars)	48.95	24.35
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	53.89	56.94
Materials	3.59	1.71
Cash overhead	14.41	14.43
Interest and depreciation (improvements and equipment)....	20.20	18.65
Interest on investment in land (at 6 per cent)	11.53	9.93
Total	103.62	101.66
Average income per acre .....	.....	.....
Average net profit per acre .....	.....	.....
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	9.60	7.35
Materials	0.64	0.22
Cash overhead	2.57	1.86
Interest and depreciation (improvements and equipment)....	3.61	2.41
Interest on investment in land (at 6 per cent)	2.05	1.28
Total	18.47	13.12
Average income per ton .....	.....	.....
Average net profit per ton .....	.....	.....

Income and net profit are not reported in the above table because complete returns were not available at time of making summary.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 14

MALAGA GRAPES COST ACCOUNT DATA, FRESNO COUNTY—1926-1927

	1926	1927
Number of records	24	14
Acres in study	323.0	152.5
Total amount produced (tons)	1,381.03	655.63
Average yield per acre (tons)	4.28	4.30
Highest yield per acre (tons)	11.40	11.70
Cost per ton on highest yield (dollars)	16.98	8.19
Lowest yield per acre (tons)	1.13	0.89
Cost per ton on lowest yield (dollars)	55.46	85.99
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	49.60	45.14
Materials	5.77	4.44
Cash overhead	13.58	14.01
Interest and depreciation (improvements and equipment)....	20.42	21.56
Interest on investment in land (at 6 per cent)	8.49	9.54
Total	97.86	94.69
Average income per acre	-----	-----
Average net profit per acre	-----	-----
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	11.59	10.50
Materials	1.35	1.03
Cash overhead	3.17	3.26
Interest and depreciation (improvements and equipment)....	4.77	5.01
Interest on investment in land (at 6 per cent)	1.98	2.22
Total	22.86	22.02
Average income per ton	-----	-----
Average net profit per ton	-----	-----

Income and net profit are not reported in the above table because complete returns were not available at time of making summary.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 15

EMPEROR GRAPES COST ACCOUNT DATA, FRESNO COUNTY—1926-1927

	1926	1927
Number of records	3	3
Acres in study	28.0	27.0
Total amount produced (tons)	118.31	126.65
Average yield per acre (tons)	4.23	4.69
Highest yield per acre (tons)	5.77	5.97
Cost per ton on highest yield (dollars)	31.92	24.83
Lowest yield per acre (tons)	3.38	3.00
Cost per ton on lowest yield (dollars)	28.45	31.55
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	57.95	76.64
Materials	10.19	5.94
Cash overhead	14.99	17.37
Interest and depreciation (improvements and equipment)....	28.16	28.43
Interest on investment in land (at 6 per cent)	10.07	10.11
Total	121.36	138.49
Average income per acre .....	.....	.....
Average net profit per acre .....	.....	.....
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	13.70	16.34
Materials	2.41	1.27
Cash overhead	3.55	3.70
Interest and depreciation (improvements and equipment)....	6.65	6.06
Interest on investment in land (at 6 per cent)	2.38	2.16
Total	28.69	29.53
Average income per ton .....	.....	.....
Average net profit per ton .....	.....	.....

Income and net profit are not reported in the above table because complete returns were not available at time of making summary.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 16

CORNICHOON GRAPES COST ACCOUNT DATA, FRESNO COUNTY—1926-1927

	1926	1927
Number of records	2	2
Acres in study	10.5	10.3
Total amount produced (tons)	53.27	60.57
Average yield per acre (tons)	5.07	5.88
Highest yield per acre (tons)	5.31	7.92
Cost per ton on highest yield (dollars)	20.00	19.23
Lowest yield per acre (tons)	4.82	3.70
Cost per ton on lowest yield (dollars)	30.25	19.58
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	61.16	55.41
Materials	8.32	3.36
Cash overhead	16.09	14.59
Interest and depreciation (improvements and equipment)....	29.89	30.95
Interest on investment in land (at 6 per cent)	10.49	9.06
Total	125.95	113.37
Average income per acre .....	.....	.....
Average net profit per acre .....	.....	.....
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	12.06	9.42
Materials	1.64	0.57
Cash overhead	3.17	2.48
Interest and depreciation (improvements and equipment)....	5.90	5.27
Interest on investment in land (at 6 per cent)	2.07	1.54
Total	24.84	19.28
Average income per ton .....	.....	.....
Average net profit per ton .....	.....	.....

Income and net profit are not reported in the above table because complete returns were not available at time of making summary.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 17

JUICE GRAPES COST ACCOUNT DATA, FRESNO COUNTY—1926-1927

	1926	1927
Number of records	4	4
Acres in study	26.3	20.0
Total amount produced (tons)	135.18	111.58
Average yield per acre (tons)	5.14	5.58
Highest yield per acre (tons)	6.10	6.40
Cost per ton on highest yield (dollars)	13.38	12.46
Lowest yield per acre (tons)	4.05	1.68
Cost per ton on lowest yield (dollars)	22.81	48.09
Average cost per acre	<i>dollars</i>	<i>dollars*</i>
Labor	46.46	56.87
Materials	6.14	2.70
Cash overhead	12.45	15.76
Interest and depreciation (improvements and equipment)....	21.79	15.27
Interest on investment in land (at 6 per cent)	8.09	9.16
Total	94.93	99.76
Average income per acre .....	.....	.....
Average net profit per acre .....	.....	.....
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	9.04	10.19
Materials	1.19	0.48
Cash overhead	2.42	2.83
Interest and depreciation (improvements and equipment)....	4.24	2.73
Interest on investment in land (at 6 per cent)	1.57	1.64
Total	18.46	17.87
Average income per ton .....	.....	.....
Average net profit per ton .....	.....	.....

Because of the various methods of selling and of deferred payments, income figures are not included in this study.

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of H. R. Keller, Assistant Farm Advisor.

TABLE 18

TOKAY GRAPES COST ACCOUNT DATA, SAN JOAQUIN COUNTY—1926-1927

	1926	1927
Number of records	18	15
Acres in study	333.0	350.0
Total amount produced (boxes)	127,206	128,100
Average yield per acre (boxes)	382	366
Highest yield per acre (boxes)	772	651
Cost per box on highest yield (dollars)	1.27	1.30
Lowest yield per acre (boxes)	201	198
Cost per box on lowest yield (dollars)	1.74	1.46
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	101.56	103.89
Materials	54.96	54.80
Cash overhead	19.79	21.47
Interest and depreciation (improvements and equipment)	69.65	66.87
Interest on investment in land (at 6 per cent)	25.12	25.13
Total	271.08	272.16
Average income per acre	287.65	289.87
Average net profit per acre	16.57	17.64
Average cost per box	<i>cents</i>	<i>cents</i>
Labor	26.5	28.4
Materials	14.4	15.0
Cash overhead	5.2	5.9
Interest and depreciation (improvements and equipment)	18.2	18.3
Interest on investment in land (at 6 per cent)	6.6	6.9
Total	70.9	74.5
Average income per box	75.3	79.2
Average net profit per box	4.4	4.7

The above table includes all labor, cash, and overhead costs of delivering packed grapes at the loading shed. The charge for loading, freight, refrigeration and commission amounted to 73.0 cents per box in 1926 and 77.3 cents per box in 1927. The average selling price per box for Tokay grapes included in this study was \$1.439 in 1926 and \$1.565 in 1927.

Included in the item of "interest and depreciation" there is a charge of 15 per cent on "net sales" to cover the risk of doing business.

The above tabulations were compiled from individual cost records kept by farmers in San Joaquin County under the direction of J. W. Adriance, Farm Advisor.

TABLE 19
RAISIN COST ACCOUNT DATA, TULARE COUNTY—1927

	1927
Number of records	27
Acres in study.....	444.0
Total amount produced (tons)	492.94
Average yield per acre (tons)	1.11
Highest yield per acre (tons)	2.44
Cost per ton on highest yield (dollars)	56.60
Lowest yield per acre (tons)	0.32
Cost per ton on lowest yield (dollars)	293.04
Average cost per acre	<i>dollars</i>
Labor	41.74
Materials	9.98
Cash overhead	3.94
Interest and depreciation (improvements and equipment)	37.73
Interest on investment in land (at 6 per cent)	11.08
Total	104.47
Average income per acre	-----
Average net profit per acre	-----
Average cost per ton	<i>dollars</i>
Labor	37.60
Materials	8.99
Cash overhead	3.55
Interest and depreciation (improvements and equipment)	33.99
Interest on investment in land (at 6 per cent)	9.98
Total	94.11
Average income per ton	-----
Average net profit per ton	-----

There were 33 records completed in 1927. Of these 32 were full bearing, five years old and over, and one was young bearing. The costs given in this table are, however, from 27 full-bearing vineyards, the raisins from which were all dried in the field. The crop from the remaining 5 full-bearing vineyards was soda dipped and dried in a dehydrator. The extra cost for this process was \$31.08 per ton.

Income and net profit are not reported because complete returns were not available at time of making summary.

The above tabulations were compiled from individual cost records kept by farmers in Tulare County under the direction of W. E. Gilfillan, Assistant Farm Advisor.

TABLE 20

PEACH COST ACCOUNT DATA, STANISLAUS COUNTY—1925-1927

	1925	1926	1927
Number of records	16	23	37
Acres in study	66.1	101.6	217.2
Total amount produced (tons)	768.74	1,492.93	2,041.63
Average yield per acre (tons)	11.63	14.50	9.41
Highest yield per acre (tons)	23.90	26.00	30.01
Cost per ton on highest yield (dollars)	15.25	14.75	11.99
Lowest yield per acre (tons)	4.40	5.70	2.37
Cost per ton on lowest yield (dollars)	41.29	58.10	77.01
Average cost per acre	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Labor	159.00	177.08	139.69
Materials	7.10	10.47	7.73
Cash overhead	25.89	36.72	19.88
Interest and depreciation (improvements, equip- ment, risk,* etc.)	100.50	93.39	79.00
Interest on investment in land (at 6 per cent)	21.00	21.19	21.23
Total	318.77	338.37	264.39
Average income per acre	409.50	580.00	211.72
Average net profit per acre	90.73	241.63	—52.67
Average cost per ton	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Labor	13.67	12.21	14.84
Materials	0.61	0.72	0.82
Cash overhead	2.23	2.53	2.11
Interest and depreciation (improvements, equip- ment, risk,* etc.)	8.64	6.44	8.40
Interest on investment in land (at 6 per cent)	1.81	1.46	2.26
Total	26.96	23.36	28.43
Average income per ton	35.21	40.00	22.50
Average net profit per ton	8.25	16.64	—5.93

The above table deals with orchards six years old and over which were considered full bearing. In addition to those listed above there were 44 orchards in the 1925 study, 60 orchards in the 1926 study, and 44 orchards in the 1927 study less than six years of age.

The labor and material costs per acre are based on the actual acreage reporting such costs. Hence, the "total costs per acre" is not a sum of the preceding column of figures. The total cost per acre is arrived at by dividing the total cost for all items of expense by the total acreage involved in each study.

* The charge itemized as "risk" was arrived at by taking 15 per cent of all expenses except interest on investment in land. This item amounted to \$41.50 per acre in 1925, \$44.15 in 1926, and \$31.69 in 1927. On a per ton basis the risk was calculated as: \$3.55 in 1925, \$3.05 in 1926, and \$3.35 in 1927.

The above tabulations were compiled from individual cost records kept by farmers in Stanislaus County under the direction of A. A. Jungerman, Farm Advisor.

TABLE 21
PEACH COST ACCOUNT DATA, TULARE COUNTY—1926—1927

	1926	1927
Number of records	12	16
Aeres in study	112.0	115.5
Total amount produced (tons)	746.60	765.77
Average yield per acre (tons)	6.67	6.63
Highest yield per acre (tons)	11.55	14.63
Cost per ton on highest yield (dollars)	19.85	15.00
Lowest yield per acre (tons)	1.11	0.00
Cost per ton on lowest yield (dollars)	124.77	*80.40
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	105.94	81.15
Materials	12.94	14.71
Cash overhead	10.16	5.16
Interest and depreciation (improvements and equipment)....	50.20	51.22
Interest on investment in land (at 6 per cent)	14.04	18.64
Total	193.28	170.88
Average income per acre	251.45	149.17
Average net profit per acre	58.17	—21.71
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	15.89	12.24
Materials	1.94	2.21
Cash overhead	1.52	0.78
Interest and depreciation (improvements and equipment)....	7.52	7.73
Interest on investment in land (at 6 per cent)	2.10	2.81
Total	28.97	25.77
Average income per ton	37.70	22.50
Average net profit per ton	8.73	—3.27

The 1926 cost data given above are for the full-bearing group of orchards which were six years old and over. There was a total of 21 orchards finishing the study, 9 of which were in young trees. The total production from both full-bearing and young trees amounted to 1,466.10 tons. In the item "cash overhead," county taxes (\$4.22 per acre) and an item of \$5.94 for general expense, are included.

A total of 34 orchards completed the 1927 study, 16 of which were of the full-bearing groups six years old and over. The remaining 18 orchards were in young trees. The total production from both full-bearing and young trees amounted to 1,342.80 tons. In the item "cash overhead," county taxes only have been included (\$5.16 per acre), no general expense item having been used this year.

* The lowest production per acre was a complete failure, so cost per acre (\$80.40) is given instead of cost per ton. The next lowest orchard was 1.31 tons per acre at a cost of \$73.92 per ton.

The above tabulations were compiled from individual cost records kept by farmers in Tulare County under the direction of W. E. Gilfillan, Farm Advisor.

TABLE 22

PEAR COST ACCOUNT DATA, LAKE COUNTY—1926-1927

	1926	1927
Number of records	17	15
Acres in study	234.0	222.0
Total amount produced (tons)	2,024.33	1,519.12
Average yield per acre (tons)	8.65	6.85
Highest yield per acre (tons)	21.60	20.00
Cost per ton on highest yield (dollars)	12.33	12.82
Lowest yield per acre (tons)	2.20	1.86
Cost per ton on lowest yield (dollars)	52.23	55.12
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	97.61	89.44
Materials	10.77	7.51
Cash overhead	17.51	15.68
Interest and depreciation (improvements and equipment)....	44.60	44.11
Interest on investment in land (at 6 per cent)	15.11	14.08
Total	185.60	170.82
Average income per acre	304.51	296.65
Average net profit per acre	118.91	125.83
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	11.28	13.06
Materials	1.24	1.10
Cash overhead	2.03	2.29
Interest and depreciation (improvements and equipment)....	5.16	6.44
Interest on investment in land (at 6 per cent)	1.75	2.05
Total	21.46	24.94
Average income per ton	35.20	43.31
Average net profit per ton	13.74	18.37

There were 36 records completed in 1926 and 31 in 1927. Of the 36 records for 1926, only 17 were for full-bearing orchards and 19 for young orchards. Of the 31 records for 1927, only 15 orchards were in the full-bearing class and 16 were for non-bearing trees.

The above tabulations were compiled from individual cost records kept by farmers in Lake County under the direction of L. C. Barnard, Farm Advisor.

TABLE 23

PEAR COST ACCOUNT DATA, MENDOCINO COUNTY—1926-1927

	1926	1927
Number of records	9	11
Acres in study	78.5	101.0
Total amount produced (tons)	881.46	712.01
Average yield per acre (tons).....	11.23	7.05
Highest yield per acre (tons).....	22.71	17.71
Cost per ton on highest yield (dollars)	10.75	15.10
Lowest yield per acre (tons)	8.03	3.66
Cost per ton on lowest yield (dollars)	28.13	53.01
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	116.85	103.72
Materials	10.00	9.91
Cash overhead	15.79	15.80
Interest and depreciation (improvements and equipment)....	42.61	40.13
Interest on investment in land (at 6 per cent)	22.62	22.07
Total	207.87	191.63
Average income per acre	370.46	305.08
Average net profit per acre	162.59	113.45
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	10.40	14.70
Materials	0.90	1.41
Cash overhead	1.40	2.24
Interest and depreciation (improvements and equipment)....	3.80	5.69
Interest on investment in land (at 6 per cent)	2.02	3.13
Total	18.52	27.17
Average income per ton	33.00	43.26
Average net profit per ton	14.48	16.09

There were 23 records completed in 1926 and 28 in 1927. Of the 23 records for 1926, only 9 were for full-bearing orchards and 14 for young orchards. Of the 28 records for 1927, only 11 orchards were in the full-bearing group and 17 were for non-bearing trees.

The above tabulations were compiled from individual cost records kept by farmers in Mendocino County under the direction of C. S. Myszka, Farm Advisor.

TABLE 24
PRUNE COST ACCOUNT DATA, NAPA COUNTY—1927

	1927
Number of records	22
Acres in study	331.00
Total amount produced (dried tons)	581.00
Average yield per acre (dried tons)	1.75
Highest yield per acre (dried tons)	3.16
Cost per ton on highest yield (dollars).....	59.10
Lowest yield per acre (dried tons)	0.26
Cost per ton on lowest yield (dollars)	344.72
Average cost per acre	<i>dollars</i>
Labor	82.32
Materials	22.26
Cash overhead	7.93
Interest and depreciation (improvements and equipment).....	59.56
Interest on investment in land (at 6 per cent).....	15.63
Total	187.70
Average income per acre .....	.....
Average net profit per acre .....	.....
Average cost per ton	<i>dollars</i>
Labor	47.04
Materials	12.72
Cash overhead	4.53
Interest and depreciation (improvements and equipment)	34.03
Interest on investment in land (at 6 per cent)	8.93
Total	107.25
Average income per ton .....	.....
Average net profit per ton .....	.....

At time records were completed many prune growers had not received their returns from sales of fruit. It was therefore impossible to give average income or net profit per acre and per ton. All tonnage figures given in the above table are on a dry-fruit basis.

The above tabulations were compiled from individual cost records kept by farmers in Napa County under the direction of H. J. Baade, Farm Advisor.

TABLE 25
GRAPEFRUIT COST ACCOUNT DATA, IMPERIAL COUNTY—1927

	1927	
	Full bearing	Young bearing
Number of records	3	4
Acres in study	8	45
Total amount produced (boxes)	1,920	1,832
Average yield per acre (boxes)	240.0	40.5
Highest yield per acre (boxes)	254.0	73.8
Cost per box on highest yield (dollars)	1.01	2.63
Lowest yield per acre (boxes)	214.0	9.4
Cost per box on lowest yield (dollars)	1.06	10.39
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	124.83	80.59
Materials	48.83	14.61
Cash overhead	4.66	3.03
Interest and depreciation (improvements and equipment)....	134.04	31.34
Interest on investment in land (at 6 per cent)	15.50	15.75
Total	327.86	145.32
Average income per acre	586.32	113.73
Average net profit per acre	258.46	—31.59
Average cost per box	<i>dollars</i>	<i>dollars</i>
Labor	0.52	1.99
Materials	0.20	0.36
Cash overhead	0.02	0.07
Interest and depreciation (improvements and equipment)....	0.56	0.77
Interest on investment in land (at 6 per cent)	0.06	0.39
Total	1.36	3.58
Average income per box	2.44	2.81
Average net profit per box	1.08	—0.77

There were 11 grapefruit records completed in 1927. Of these, 3 were in the full bearing class (over seven years of age), 4 were in the young bearing class (from three to five years of age), and 4 were non-bearing (less than three years of age). The 4 non-bearing orchards contained 58 acres.

The above tabulations were compiled from individual cost records kept by farmers in Imperial County under the direction of F. G. Beyschlag, Assistant Farm Advisor.

TABLE 26

LEMON COST ACCOUNT DATA, ORANGE COUNTY—1926-1927

	1926	1927
Number of records	7	10
Acres in study	52.0	55.0
Total amount produced (cwt.)	9,016	8,855
Average yield per acre (cwt.)	173	161
Highest yield per acre (cwt.)	248	277
Cost per cwt. on highest yield (dollars)	1.89	1.84
Lowest yield per acre (cwt.)	137	85
Cost per cwt. on lowest yield (dollars)	3.67	4.09
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	154.11	157.67
Materials	77.19	90.24
Cash overhead	35.77	39.22
Interest and depreciation (improvements and equipment)....	108.93	99.53
Interest on investment in land (at 6 per cent)	59.27	62.06
Total	435.27	448.72
Average income per acre	370.05	451.24
Average net profit per acre	-65.22	2.52
Average cost per hundredweight	<i>dollars</i>	<i>dollars</i>
Labor	0.89	0.98
Materials	0.45	0.56
Cash overhead	0.21	0.24
Interest and depreciation (improvements and equipment)....	0.63	0.62
Interest on investment in land (at 6 per cent)	0.34	0.38
Total	2.52	2.78
Average income per cwt.	2.14	2.80
Average net profit per cwt.	-0.38	0.02

The above figures for 1926 and 1927 refer to full-bearing orchards ten years old and over.

The above tabulations were compiled from individual cost records kept by farmers in Orange County under the direction of H. E. Wahlberg, Farm Advisor.

TABLE 27

ORANGE COST ACCOUNT DATA, ORANGE COUNTY—1926-1927

	1926	1927
Number of records	24	61
Acres in study	238.3	598.0
Total amount produced (boxes)	52,700	129,766
Average yield per acre (boxes)	221	217
Highest yield per acre (boxes)	536	563
Cost per box on highest yield (dollars)	1.05	0.80
Lowest yield per acre (boxes)	85	87
Cost per box on lowest yield (dollars)	3.68	5.96
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	82.70	98.22
Materials	76.23	88.04
Cash overhead	31.97	42.71
Interest and depreciation (improvements and equipment)	111.04	99.84
Interest on investment in land (at 6 per cent)	72.76	70.71
Total	374.70	399.52
Average income per acre	579.04	655.55
Average net profit per acre	204.34	256.03
Average cost per box	<i>cents</i>	<i>cents</i>
Labor	37.4	45.3
Materials	34.5	40.6
Cash overhead	14.5	19.7
Interest and depreciation (improvements and equipment)	50.2	46.0
Interest on investment in land (at 6 per cent)	32.9	32.6
Total	169.5	184.2
Average income per box	262.0	302.1
Average net profit per box	92.5	117.9

The above figures for 1926 and 1927 refer to full-bearing orchards ten years old and over. There were 35 records completed in 1926 and 61 in 1927. Of the 35 records for 1926, 24 were for full-bearing orchards and 11 were for orchards less than ten years of age. Of the 75 records for 1927, 61 were for full-bearing orchards and 14 were for orchards under ten years of age.

The above tabulations were compiled from individual cost records kept by farmers in Orange County under the direction of H. E. Wahlberg, Farm Advisor.

TABLE 28

WALNUT COST ACCOUNT DATA, LOS ANGELES COUNTY—1927

	1927
Number of records	33
Acres in study	891.0
Total amount produced (lbs.)	1,726,758
Average yield per acre (lbs.)	1,938
Highest yield per acre (lbs.)	3,069
Cost per lb. on highest yield (cents)	8.1
Lowest yield per acre (lbs.)	602
Cost per lb. on lowest yield (cents)	40.4
Average cost per acre	<i>dollars</i>
Labor	66.26
Materials	11.69
Cash overhead	24.78
Interest and depreciation (improvements and equipment)	49.82
Interest on investment in land (at 6 per cent)	45.00
Total	197.55
Average income per acre .....	.....
Average net profit per acre .....	.....
Average cost per pound	<i>cents</i>
Labor	3.4
Materials	0.6
Cash overhead	1.3
Interest and depreciation (improvements and equipment)	2.6
Interest on investment in land (at 6 per cent)	2.3
Total	10.2
Average income per pound .....	.....
Average net profit per pound .....	.....

There were 40 records completed at the end of the year. Of these 40 records, 33 were for full-bearing groves and 7 for young groves. Mature groves are those twelve years old and over. Income and net profit are not reported because complete returns were not available at the time of making the summary.

The above tabulations were compiled from individual cost records kept by farmers in Los Angeles County under the direction of M. H. Kimball, Assistant Farm Advisor.

TABLE 29

WALNUT COST ACCOUNT DATA, SAN JOAQUIN COUNTY—1926—1927

	1926	1927
Number of records	8	14
Acres in study	709	1,016
Total amount produced (lbs.)	184,000	1,150,000
Average yield per acre (lbs.)	260	1,132
Highest yield per acre (lbs.)	1,007	1,752
Cost per lb. on highest yield (cents)	19.4	15.4
Lowest yield per acre (lbs.)	170	509
Cost per lb. on lowest yield (cents)	97.2	47.2
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	50.14	53.43
Materials	11.19	26.95
Cash overhead	8.60	10.63
Interest and depreciation (improvements and equipment)	74.41	80.83
Interest on investment in land (at 6 per cent)	20.26	22.05
Total	164.60	193.89
Average income per acre	62.96	214.03
Average net profit per acre	—101.64	20.14
Average cost per pound	<i>cents</i>	<i>cents</i>
Labor	19.3	4.7
Materials	4.3	2.4
Cash overhead	3.3	0.9
Interest and depreciation (improvements and equipment)	28.7	7.1
Interest on investment in land (at 6 per cent)	7.8	2.0
Total	63.4	17.1
Average income per pound	24.2	18.9
Average net profit per pound	—39.2	1.8

There were 12 records completed in 1926 and 19 in 1927. Of the 12 records for 1926, 8 were for full-bearing groves and 4 were for young groves. Of the 19 records for 1927, 14 groves were in the full-bearing class and 5 were for non-bearing trees.

Walnut blight caused at least 70 per cent damage to the crop in 1926, resulting in a very high cost per pound.

The above tabulations were compiled from individual cost records kept by farmers in San Joaquin County under the direction of J. W. Adriance, Farm Advisor.

TABLE 30

WALNUT COST ACCOUNT DATA, SANTA BARBARA COUNTY—1926-1927

	1926	1927
Number of records	34	24
Acres in study	514.6	385.0
Total amount produced (lbs.)	211,501	916,300
Average yield per acre (lbs.)	411	2,380
Highest yield per acre (lbs.)	900	3,243
Cost per lb. on highest yield (cents)	22.7	9.3
Lowest yield per acre (lbs.)	3.2	941.0
Cost per lb. on lowest yield (cents)	47.1	21.0
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	38.67	71.40
Materials	9.64	8.53
Cash overhead	27.61	30.87
Interest and depreciation (improvements and equipment)	68.30	66.17
Interest on investment in land (at 6 per cent)	64.80	64.32
Total	209.02	241.29
Average income per acre	91.84	337.15
Average net profit per acre	-117.18	95.86
Average cost per pound	<i>cents</i>	<i>cents</i>
Labor	9.4	3.0
Materials	2.3	0.4
Cash overhead	6.7	1.3
Interest and depreciation (improvements and equipment)	16.6	2.7
Interest on investment in land (at 6 per cent)	15.8	2.7
Total	50.8	10.1
Average income per pound	22.3	14.2
Average net profit per pound	-28.5	4.1

There were 40 records completed in 1926 and 28 in 1927. Of the 40 records for 1926, 34 were for full-bearing groves and 6 were for young groves. Of the 28 records for 1927, 24 groves were in the full-bearing class and 4 were for non-bearing trees. The weighted average cost of production covering the two-year period was 16.1 cents per pound.

The above tabulations were compiled from individual cost records kept by farmers in Santa Barbara County under the direction of B. L. Hagglund, Farm Advisor.

TABLE 31
ALFALFA COST ACCOUNT DATA, MERCED COUNTY—1927

	1926	1927
Number of records	5	15
Acres in study	133	309
Total amount produced (tons)	687.00	1,680.00
Average yield per acre (tons)	5.16	5.44
Highest yield per acre (tons)	6.20	9.87
Cost per ton on highest yield (dollars)	8.01	6.81
Lowest yield per acre (tons)	4.30	3.70
Cost per ton on lowest yield (dollars)	13.34	12.71
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	23.83	22.72
Materials	8.10	5.77
Cash overhead	3.85	3.79
Interest and depreciation (improvements and equipment)....	8.52	13.04
Interest on investment in land (at 6 per cent)	13.94	14.14
Total	58.24	59.46
Average income per acre	51.65	63.05
Average net profit per acre	—6.59	3.59
Average cost per ton	<i>dollars</i>	<i>dollars</i>
Labor	4.61	4.18
Materials	1.58	1.06
Cash overhead	0.75	0.69
Interest and depreciation (improvements and equipment)....	1.65	2.40
Interest on investment in land (at 6 per cent)	2.70	2.60
Total	11.29	10.93
Average income per ton	10.00	11.59
Average net profit per ton	—1.29	0.66

Average cost per ton in 1927 is \$10.93, fairly close to the average cost of 1926, which was \$11.29. Costs per ton varied from \$6.74 to \$17.49, while per acre costs ranged from \$42.48 to \$96.97. Labor and material costs amounted to 48 per cent of the total costs, while the remaining outlay of 52 per cent represented overhead. The farmer having lowest cost per ton combined three factors: (1) heavy yield, (2) low overhead costs, and (3) saving in labor costs through use of slings and other efficient methods.

The above tabulations were compiled from individual cost records kept by farmers in Merced County under the direction of W. H. Alison, Jr., Assistant Farm Advisor.

TABLE 32

BEAN COST ACCOUNT DATA, SANTA BARBARA COUNTY—1927

	1927
Number of records	18
Acres in study	1,046
Total amount produced (cwt.)	8,973.67
Average yield per acre (cwt.)	8.58
Highest yield per acre (cwt.)	18.78
Cost per cwt. on highest yield (dollars)	4.92
Lowest yield per acre (cwt.)	3.92
Cost per cwt. on lowest yield (dollars)	7.92
Average cost per acre	<i>dollars</i>
Labor	21.89
Materials	3.82
Cash overhead	3.47
Interest and depreciation (improvements and equipment, etc.)	2.41
Interest on investment in land (at 6 per cent)	15.23
Total	46.82
Average income per acre	50.44
Average net profit per acre	3.62
Average cost per hundredweight	<i>dollars</i>
Labor	2.55
Materials	0.45
Cash overhead	0.40
Interest and depreciation (improvements and equipment)	0.28
Interest on investment in land (at 6 per cent)	1.78
Total	5.46
Average income per cwt.	5.88
Average net profit per cwt.	0.42

Approximately 50 per cent of the acreage in this study is on rented land.

The above tabulations were compiled from individual cost records kept by farmers in Santa Barbara County under the direction of E. F. Smyth, Assistant Farm Advisor.

TABLE 33

COTTON COST ACCOUNT DATA, KERN COUNTY—1926-1927

	1926	1927
Number of records	6	5
Acres in study	137	113
Total amount produced (lbs.)	74,609	61,257
Average yield per acre (lbs.)	545	542
Highest yield per acre (lbs. lint)	796	855
Cost per lb. on highest yield (cents)	15.5	14.1
Lowest yield per acre (lbs. lint)	475	457
Cost per lb. on lowest yield (cents)	16.6	21.0
Average cost per acre	<i>dollars</i>	<i>dollars</i>
Labor	60.55	50.40
Materials	11.32	8.35
Cash overhead	4.31	4.51
Interest and depreciation (improvements and equipment)	9.27	6.52
Interest on investment in land (at 6 per cent)	13.31	14.62
Total	98.76	84.40
Average income per acre	95.58	134.62
Average net profit per acre	—3.18	50.22
Average cost per pound lint	<i>cents</i>	<i>cents</i>
Labor	11.1	9.3
Materials	2.1	1.5
Cash overhead	0.8	0.8
Interest and depreciation (improvements and equipment)	1.7	1.2
Interest on investment in land (at 6 per cent)	2.4	2.7
Total	18.1	15.5
Average income per pound	17.5	24.8
Average net profit per pound	—0.6	9.3

The average income per acre and per pound in the above table include receipts from lint cotton and cotton seed. For 1926, the receipts for lint cotton were \$79.86 per acre or 14.6 cents per pound and for cotton seed \$15.72 per acre or 2.9 cents per pound. In 1927, the receipts for lint cotton amounted to \$113.26 per acre or 20.9 cents per pound, while that for cotton seed amounted to \$21.36 per acre or 3.9 cents per pound.

The above tabulations were compiled from individual cost records kept by farmers in Kern County under the direction of L. W. Taylor, Farm Advisor.

TABLE 34
POTATO COST ACCOUNT DATA, KERN COUNTY—1927

	1927
Number of records	6
Acres in study	147
Total amount produced (lbs.)	1,282,154
Average yield per acre (lbs.)	8,722
Highest yield per acre (lbs.)	12,526
Cost per cwt. on highest yield (dollars)	1.51
Lowest yield per acre (lbs.)	4,625
Cost per cwt. on lowest yield (dollars)	2.64
Average cost per acre	<i>dollars</i>
Labor	49.22
Materials	58.46
Cash overhead	6.87
Interest and depreciation (improvements and equipment)	6.42
Interest on investment in land (at 6 per cent) or rental	40.85
Total	161.82
Average income per acre	222.79
Average net profit per acre	60.97
Average cost per hundredweight	<i>dollars</i>
Labor	0.56
Materials	0.67
Cash overhead	0.08
Interest and depreciation (improvements and equipment)	0.07
Interest on investment in land (at 6 per cent) or rental	0.47
Total	1.85
Average income per cwt.	2.55
Average net profit per cwt.	0.70

Land charge is high in the above tabulation because half of the cooperators were renters, paying a third of crop as rental.

The above tabulations were compiled from individual cost records kept by farmers in Kern County under the direction of L. W. Taylor, Farm Advisor.

TABLE 35

WHEAT COST ACCOUNT DATA, SAN LUIS OBISPO COUNTY—1927

	1927
Number of records	15
Acres in study	1,915
Total amount produced (cwt.)	19,916
Average yield per acre (cwt.)	10.4
Highest yield per acre (cwt.)	23.0
Cost per cwt. on highest yield (dollars)	1.18
Lowest yield per acre (cwt.)	4.0
Cost per cwt. on lowest yield (dollars)	3.92
Average cost per acre	<i>dollars</i>
Labor	5.70
Materials	2.15
Cash overhead	0.88
Interest and depreciation (improvements and equipment)	0.90
Interest on investment in land (at 6 per cent)	2.98
Summer fallow*	5.47
Total	18.08
Average income per acre	20.53
Average net profit per acre	2.45
Average cost per hundredweight	<i>dollars</i>
Labor	0.55
Materials	0.21
Cash overhead	0.08
Interest and depreciation (improvements and equipment)	0.09
Interest on investment in land (at 6 per cent)	0.29
Summer fallow*	0.52
Total	1.74
Average income per cwt.	1.98
Average net profit per cwt.	0.24

* The summer fallow charge includes all labor, material and overhead costs of carrying the land through the summer fallow year.

The above tabulations were compiled from individual cost records kept by farmers in San Luis Obispo County under the direction of J. Earl Coke, Assistant Farm Advisor.

TABLE 36
SUMMER FALLOW COST ACCOUNT DATA ON GRAIN LAND, SAN LUIS OBISPO
COUNTY—1927

	1927
Number of records	19
Acres in study	3,112
Highest cost per acre (dollars)	13.97
Lowest cost per acre (dollars)	3.73
Average cost per acre	<i>dollars</i>
Labor	2.28
Materials	0.08
Cash overhead	0.29
Interest and depreciation (improvements and equipment)	0.29
Interest on investment in land (at 6 per cent)	2.67
Total	5.61

The above tabulations were compiled from individual cost records kept by farmers in San Luis Obispo County under the direction of J. Earl Coke, Assistant Farm Advisor.

TABLE 37

DAIRY COST ACCOUNT DATA, IMPERIAL COUNTY—1926-1927

	1926	1927
Number of records	14	15
Total number of cows in study	403	482
Average number cows per herd	28.8	32.1
Average pounds milk per cow	6,773.0	6,556.0
Average pounds butterfat per cow	272.6	272.0
Average pounds butterfat per cow to pay expenses	250.4	234.0
Highest herd average: pounds butterfat per cow	390.0	381.4
Average cost per pound: highest producing herds (cents)....	58.6	46.7
Lowest herd average: pounds butterfat per cow	214.4	203.6
Average cost per pound: lowest producing herds (cents)....	88.6	55.6
Average cost per cow	<i>dollars</i>	<i>dollars</i>
Concentrate feeds	5.67	4.63
Roughage (hay, silage)	21.85	19.79
Pasture and green feeds	51.00	42.35
Labor	44.85	39.80
Dairy stock		11.24
Miscellaneous	13.69	8.80
Depreciation on buildings and equipment	1.60	3.65
Interest on investment (at 6 per cent)	10.76	11.47
Total	149.42	141.73
Average gross income per cow	157.18	173.40
Average net profit per cow	7.76	31.67
Average farm income per cow	52.56	71.03
Average labor income per cow	41.80	59.56
Average cost per pound butterfat	<i>cents</i>	<i>cents</i>
Concentrate feeds	2.1	1.7
Roughage (hay, silage)	8.0	7.3
Pasture and green feeds	18.7	15.6
Labor	16.4	14.7
Dairy stock		4.1
Miscellaneous	5.0	3.2
Depreciation on buildings and equipment	0.6	1.3
Interest on investment (at 6 per cent)	4.0	4.2
Total	54.8	52.1
Average gross income per pound butterfat	57.7	63.7
Average net profit per pound butterfat	2.9	11.6
Average farm income per pound butterfat	19.3	26.1
Average labor income per pound butterfat	15.3	21.9

The above tabulations were compiled from individual cost records kept by farmers in Imperial County under the direction of V. W. DeTar, Farm Advisor.

TABLE 38

DAIRY COST ACCOUNT DATA, KERN COUNTY—1927

	1927
Number of records.....	9
Total number of cows in study	288
Average number cows per herd	32
Average pounds milk per cow	
Average pounds butterfat per cow	286.7
Average pounds butterfat per cow to pay expenses	225.0
Highest herd average: pounds butterfat per cow.....	352.0
Average cost per pound: highest producing herds (cents)	49.8
Lowest herd average: pounds butterfat per cow	249.0
Average cost per pound: lowest producing herds (cents)	51.6
Average cost per cow	<i>dollars</i>
Concentrate feeds	9.11
Roughage (hay, silage)	40.70
Pasture and green feeds	22.13
Labor	36.91
Dairy stock	16.27
Miscellaneous	7.45
Depreciation on buildings and equipment	
Interest on investment (at 6 per cent)	13.69
Total	146.26
Average gross income per cow	186.57
Average net profit per cow	40.31
Average farm income per cow	71.03
Average labor income per cow.....	57.34
Average cost per pound butterfat	<i>cents</i>
Concentrate feeds	3.2
Roughage (hay, silage)	14.2
Pasture and green feeds	7.7
Labor	12.8
Dairy stock	5.7
Miscellaneous	2.6
Depreciation on buildings and equipment	
Interest on investment (at 6 per cent)	4.8
Total	51.0
Average gross income per pound butterfat	65.1
Average net profit per pound butterfat	14.1
Average farm income per pound butterfat	24.8
Average labor income per pound butterfat	20.0

The above tabulations were compiled from individual cost records kept by farmers in Kern County under the direction of J. P. Hertel, Assistant Farm Advisor.

TABLE 39
DAIRY COST ACCOUNT DATA, MARIN COUNTY—1925-1927

	1925	1926	1927
Number of records	8	4	3
Total number of cows in study	498	412	
Average number of cows per herd	62	59	
Average pounds milk per cow	5,965.0	5,080.2	
Average pounds butterfat per cow	241.5	198.1	
Average pounds butterfat per cow to pay expenses		202.4	
Highest herd average: pounds butterfat per cow			
Average cost per pound: highest producing herds (cents)			
Lowest herd average: pounds butterfat per cow			
Average cost per pound: lowest producing herds (cents)			
Average cost per cow	<i>dollars</i>	<i>dollars</i>	
Concentrate feeds		21.81	
Roughage (hay, silage)	67.10	33.56	
Pasture and green feeds		13.99	
Labor		25.15	
Dairy stock			
Miscellaneous	4.10	3.71	
Depreciation on buildings and equipment		1.39	
Interest on investment (at 6 per cent)		10.30	
Total	93.00	109.91	
Average gross income per cow	127.80	124.62	
Average net profit per cow	34.80	14.71	
Average farm income per cow		41.84	
Average labor income per cow		32.08	
Average cost per pound butterfat	<i>cents</i>	<i>cents</i>	
Concentrate feeds	27.8	11.0	
Roughage (hay, silage)		16.9	
Pasture and green feeds		7.1	
Labor	9.0	12.7	
Dairy stock			
Miscellaneous	1.7	1.9	
Depreciation on buildings and equipment		0.7	
Interest on investment (at 6 per cent)		5.2	
Total	38.5	55.5	
Average gross income per pound butterfat	52.9	62.9	
Average net profit per pound butterfat	14.4	7.4	
Average farm income per pound butterfat		21.1	
Average labor income per pound butterfat		16.2	

The 1925 records were not summarized on the same basis as the 1926-1927 records. Hence, some items appearing in the 1926-1927 records are not included in the 1925 summary. Owing to the small number of records in 1926-1927, these two years were summarized together.

The above tabulations were compiled from individual cost records kept by farmers in Marin County under the direction of M. B. Boissevain, Farm Advisor.

TABLE 40

DAIRY COST ACCOUNT DATA, RIVERSIDE COUNTY—1927

	1927
Number of records	4
Total number of cows in study	232
Average number cows per herd	58
Average pounds milk per cow	8,675.0
Average pounds butterfat per cow	379.4
Average pounds butterfat per cow to pay expenses	349.0
Highest herd average: pounds butterfat per cow	428.0
Average cost per pound: highest producing herds (cents)	65.3
Lowest herd average: pounds butterfat per cow	310.0
Average cost per pound: lowest producing herds (cents)	98.8
Average cost per cow	<i>dollars</i>
Concentrate feeds	48.81
Roughage (hay, silage)	91.95
Pasture and green feeds	5.94
Labor	41.55
Dairy stock	11.65
Miscellaneous	15.77
Depreciation on buildings and equipment	9.41
Interest on investment (at 6 per cent)	23.23
Total	248.31
Average gross income per cow	317.78
Average net profit per cow	69.47
Average farm income per cow	99.05
Average labor income per cow	75.83
Average cost per pound butterfat	<i>cents</i>
Concentrate feeds	12.8
Roughage (hay, silage)	24.3
Pasture and green feeds	1.6
Labor	10.9
Dairy stock	3.1
Miscellaneous	4.1
Depreciation on buildings and equipment	2.5
Interest on investment (at 6 per cent)	6.1
Total	65.4
Average gross income per pound butterfat	83.7
Average net profit per pound butterfat	18.3
Average farm income per pound butterfat	26.1
Average labor income per pound butterfat	19.9

The above tabulations were compiled from individual cost records kept by farmers in Riverside County under the direction of N. L. McFarlane, Assistant Farm Advisor.

TABLE 41
DAIRY COST ACCOUNT DATA, SAN BERNARDINO COUNTY—1927

	1927
Number of records	12
Total number of cows in study	700
Average number cows per herd	58
Average pounds milk per cow	9,014.0
Average pounds butterfat per cow	353.0
Average pounds butterfat per cow to pay expenses	366.0
Highest herd average: pounds butterfat per cow	403.0
Average cost per pound: highest producing herds (cents)	65.0
Lowest herd average: pounds butterfat per cow	306.0
Average cost per pound: lowest producing herds (cents)	92.0
Average cost per cow	<i>dollars</i>
Concentrate feeds	51.60
Roughage (hay, silage)	105.00
Pasture and green feeds	4.06
Labor	61.75
Dairy stock	23.10
Miscellaneous	23.29
Decrease in inventory stock	14.39
Depreciation on buildings and equipment	5.50
Interest on investment (at 6 per cent)	19.16
Total	307.85
Average gross income per cow	376.37
Average net profit per cow	68.52
Average farm income per cow	105.89
Average labor income per cow	86.74
Average cost per pound butterfat	<i>cents</i>
Concentrate feeds	14.7
Roughage (hay, silage)	29.7
Pasture and green feeds	1.1
Labor	17.5
Dairy stock	6.5
Miscellaneous	6.6
Decrease in inventory stock	4.1
Depreciation on buildings and equipment	1.6
Interest on investment (at 6 per cent)	5.4
Total	87.2
Average gross income per pound butterfat	106.6
Average net profit per pound butterfat	19.4
Average farm income per pound butterfat	30.0
Average labor income per pound butterfat	24.6

The above tabulations were compiled from individual cost records kept by farmers in San Bernardino County under the direction of A. L. Campbell, Assistant Farm Advisor.

TABLE 42
POULTRY COST ACCOUNT DATA, FRESNO COUNTY—1925-1927

	1925	1926	1927
Number of records	3	7	5
Total number hens in study	898	1,454	1,254
Average number hens per flock	299	208	251
Average number eggs per hen	181.0	165.0	171.0
Highest flock average: eggs per hen	188.5	200.0	183.3
Average cost per dozen for highest producing flock (cents)	21.3	28.7	21.5
Lowest flock average: eggs per hen	154.2	125.3	160.0
Average cost per dozen for lowest producing flock (cents)	47.1	25.8	29.8
Average per cent mortality all flocks	9.9	8.3	10.4
Highest flock: average per cent mortality	11.7	24.0	20.0
Lowest flock: average per cent mortality	2.5	5.0	1.4
Average cost per hen	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Feed	2.41	2.14	2.12
Stock purchases	0.05	0.15	0.50
Decrease in inventory (stock)	0.03	.....	0.13
Labor	0.72	0.93	0.88
Water, taxes, insurance	0.07	0.06	0.12
Interest on investment (at 6 per cent)	0.40	0.35	0.34
Other overhead	0.13	0.01	0.05
Total	3.81	3.64	4.14
Average gross income per hen	5.76	4.46	4.78
Average net profit per hen	1.95	0.82	0.64
Average flock farm income per hen	3.34	1.51	1.92
Average flock labor income per hen	2.94	1.16	1.58
Average cost per dozen	<i>cents</i>	<i>cents</i>	<i>cents</i>
Feed	15.9	15.6	14.9
Stock purchases	0.3	1.1	3.5
Decrease in inventory (stock)	0.2	.....	0.9
Labor	4.8	6.8	6.2
Water, taxes, insurance	0.5	0.4	0.8
Interest on investment (at 6 per cent)	2.6	2.6	2.4
Other overhead	0.9	0.0	0.4
Total	25.2	26.5	29.1
Average gross income per dozen	38.1	32.5	33.7
Average net profit per dozen	12.9	6.0	4.6
Average flock farm income per dozen	22.1	11.0	13.5
Average flock labor income per dozen	19.4	8.5	11.1

The above tabulations were compiled from individual cost records kept by farmers in Fresno County under the direction of J. C. Hays, Assistant Farm Advisor.

TABLE 43
POULTRY COST ACCOUNT DATA, HUMBOLDT COUNTY—1927

	1927
Number of records	17
Total number hens in study	15,606
Average number hens per flock	918
Average number eggs per hen	161.0
Highest flock average: eggs per hen	187.0
Average cost per dozen for highest producing flocks (cents)	28.2
Lowest flock average: eggs per hen	131.0
Average cost per dozen for lowest producing flock (cents)	37.2
Average per cent mortality all flocks	18.1
Highest flock: average per cent mortality	38.8
Lowest flock: average per cent mortality	7.0
Average cost per hen	<i>dollars</i>
Feed	2.50
Stock purchases	0.36
Decrease in inventory (stock) .....	.....
Labor	0.85
Water, taxes, insurance	0.06
Interest on investment (at 6 per cent)	0.22
Other overhead	0.24
Total	4.23
Average gross income per hen	4.28
Average net profit per hen	0.05
Average flock farm income per hen	1.05
Average flock labor income per hen	0.82
Average cost per dozen	<i>cents</i>
Feed	18.7
Stock purchases	2.7
Decrease in inventory (stock) .....	.....
Labor	6.3
Water, taxes, insurance	0.4
Interest on investment (at 6 per cent)	1.6
Other overhead	1.8
Total	31.5
Average gross income per dozen	31.8
Average net profit per dozen	0.3
Average flock farm income per dozen	7.8
Average flock labor income per dozen	6.1

The above tabulations were compiled from individual cost records kept by farmers in Humboldt County under the direction of J. W. Logan, Farm Advisor.

TABLE 44

POULTRY COST ACCOUNT DATA, IMPERIAL COUNTY—1927

	1927
Number of records	*9
Total number hens in study	4,758
Average number hens per flock	528
Average number eggs per hen	116.0
Highest flock average: eggs per hen	146.0
Average cost per dozen for highest producing flock (cents)	32.9
Lowest flock average: eggs per hen	84.0
Average cost per dozen for lowest producing flock (cents).....	74.8
Average per cent mortality all flocks	22.3
Highest flock: average per cent mortality	36.4
Lowest flock: average per cent mortality	6.1
Average cost per hen	<i>dollars</i>
Feed	1.54
Stock purchases	0.17
Decrease in inventory (stock)	0.11
Labor	0.79
Water, taxes, insurance	0.04
Interest on investment (at 6 per cent)	0.18
Other overhead	0.25
Total	3.08
Average gross income per hen	2.84
Average net profit per hen	—0.24
Average flock farm income per hen	0.69
Average flock labor income per hen	0.51
Average cost per dozen	<i>cents</i>
Feed	15.9
Stock purchases	1.8
Decrease in inventory (stock)	1.1
Labor	8.2
Water, taxes, insurance	0.4
Interest on investment (at 6 per cent)	1.9
Other overhead	2.6
Total	31.9
Average gross income per dozen	29.4
Average net profit per dozen	—2.5
Average flock farm income per dozen	7.1
Average flock labor income per dozen	5.3

* Four other records were completed but not included in this material.

The above tabulations were compiled from individual cost records kept by farmers in Imperial County under the direction of D. E. Creighton, Assistant Farm Advisor.

TABLE 45
POULTRY COST ACCOUNT DATA, KERN COUNTY—1927

	1927
Number of records	31
Total number hens in study	11,005
Average number hens per flock	355
Average number eggs per hen	155.0
Highest flock average: eggs per hen	173.0
Average cost per dozen for highest producing flock (cents).....	21.9
Lowest flock average: eggs per hen.....	116.0
Average cost per dozen for lowest producing flock (cents)	93.5
Average per cent mortality all flocks	12.4
Highest flock: average per cent mortality	23.2
Lowest flock: average per cent mortality	3.2
Average cost per hen	<i>dollars</i>
Feed	2.27
Stock purchases	0.31
Decrease in inventory (stock).....	.....
Labor	0.76
Water, taxes, insurance	0.02
Interest on investment (at 6 per cent)	0.26
Other overhead	0.16
Total	3.78
Average gross income per hen	4.61
Average net profit per hen	0.83
Average flock farm income per hen	1.85
Average flock labor income per hen	1.59
Average cost per dozen	<i>cents</i>
Feed	17.6
Stock purchases	2.4
Decrease in inventory (stock).....	.....
Labor	5.9
Water, taxes, insurance	0.2
Interest on investment (at 6 per cent)	1.9
Other overhead	1.2
Total	29.2
Average gross income per dozen	35.7
Average net profit per dozen	6.5
Average flock farm income per dozen	14.4
Average flock labor income per dozen	12.3

The above tabulations were compiled from individual cost records kept by farmers in Kern County under the direction of J. P. Hertel, Assistant Farm Advisor.

TABLE 46
POULTRY COST ACCOUNT DATA, MONTEREY COUNTY—1927

	1927
Number of records	19
Total number hens in study	14,504
Average number hens per flock	763
Average number eggs per hen	150.4
Highest flock average: eggs per hen	189.0
Average cost per dozen for highest producing flock (cents)	20.2
Lowest flock average: eggs per hen	132.0
Average cost per dozen for lowest producing flock (cents)	27.6
Average per cent mortality all flocks	14.0
Highest flock: average per cent mortality	35.0
Lowest flock: average per cent mortality	7.5
Average cost per hen	<i>dollars</i>
Feed	1.92
Stock purchases	0.07
Decrease in inventory (stock) .....	.....
Labor	0.63
Water, taxes, insurance	0.05
Interest on investment (at 6 per cent)	0.21
Other overhead	0.22
Total	3.10
Average gross income per hen	4.17
Average net profit per hen	1.07
Average flock farm income per hen	1.90
Average flock labor income per hen	1.69
Average cost per dozen	<i>cents</i>
Feed	15.3
Stock purchases	0.6
Decrease in inventory (stock) .....	.....
Labor	5.0
Water, taxes, insurance	0.4
Interest on investment (at 6 per cent)	1.7
Other overhead	1.8
Total	24.8
Average gross income per dozen	33.3
Average net profit per dozen	8.5
Average flock farm income per dozen	15.2
Average flock labor income per dozen	13.5

The above tabulations were compiled from individual cost records kept by farmers in Monterey County under the direction of Reuben Albaugh, Assistant Farm Advisor.

TABLE 47

POULTRY COST ACCOUNT DATA, NAPA COUNTY—1926-1927

	1926	1927
Number of records	14	14
Total number hens in study	11,941	11,882
Average number hens per flock	853	849
Average number eggs per hen	152.7	143.0
Highest flock average: eggs per hen	174.0	171.0
Average cost per dozen for highest producing flock (cents)	25.7	22.9
Lowest flock average: eggs per hen	99.0	118.0
Average cost per dozen for lowest producing flocks (cents)	39.7	27.7
Average per cent mortality all flocks.....	14.4	15.4
Highest flock: average per cent mortality	33.8	24.9
Lowest flock: average per cent mortality.....	5.4	6.5
Average cost per hen	<i>dollars</i>	<i>dollars</i>
Feed	2.25	2.44
Stock purchases	0.47	0.19
Decrease in inventory (stock) .....	.....	.....
Labor	0.81	0.54
Water, taxes, insurance	0.06	0.04
Interest on investment (at 6 per cent)	0.27	0.25
Other overhead	0.26	0.20
Total	4.12	3.66
Average gross income per hen	4.74	4.11
Average net profit per hen	0.62	0.45
Average flock farm income per hen	1.50	1.06
Average flock labor income per hen	1.23	0.81
Average cost per dozen	<i>cents</i>	<i>cents</i>
Feed	17.7	20.5
Stock purchases	3.7	1.6
Decrease in inventory (stock) .....	.....	.....
Labor	6.4	4.5
Water, taxes, insurance	0.5	0.3
Interest on investment (at 6 per cent)	2.1	2.1
Other overhead	2.0	1.7
Total	32.4	30.7
Average gross income per dozen	37.2	34.4
Average net profit per dozen	4.8	3.7
Average flock farm income per dozen.....	11.8	8.9
Average flock labor income per dozen	9.7	6.8

The above tabulations were compiled from individual cost records kept by farmers in Napa County under the direction of W. H. Cudaback, Assistant Farm Advisor.

TABLE 48

POULTRY COST ACCOUNT DATA, ORANGE COUNTY—1927

	1927	
	Commercial flocks	Hatching flocks
Number of records	10	4
Total number hens in study	8,170	5,004
Average number hens per flock	817	1,251
Average number eggs per hen	129.0	144.0
Highest flock average: eggs per hen	150.0	174.0
Average cost per dozen for highest producing flock (cents)	36.9	39.0
Lowest flock average: eggs per hen	113.0	127.0
Average cost per dozen for lowest producing flock (cents)	73.4	33.9
Average per cent mortality all flocks	17.0	14.3
Highest flock: average per cent mortality	27.5	18.5
Lowest flock: average per cent mortality	7.9	10.4
Average cost per hen	<i>dollars</i>	<i>dollars</i>
Feed	2.60	2.57
Stock purchases	0.31	0.09
Decrease in inventory (stock) .....	.....	.....
Labor	1.46	1.20
Water, taxes, insurance	0.05	0.12
Interest on investment (at 6 per cent)	0.35	0.40
Other overhead	0.35	0.62
Total	5.12	5.00
Average gross income per hen	3.98	5.26
Average net profit per hen	—1.14	0.26
Average flock farm income per hen	0.47	1.62
Average flock labor income per hen	0.12	1.22
Average cost per dozen	<i>cents</i>	<i>cents</i>
Feed	24.1	21.4
Stock purchases	2.9	0.7
Decrease in inventory (stock) .....	.....	.....
Labor	13.5	10.0
Water, taxes, insurance	0.5	1.0
Interest on investment (at 6 per cent)	3.2	3.3
Other overhead	3.2	5.2
Total	47.4	41.6
Average gross income per dozen	36.9	43.8
Average net profit per dozen	—10.5	2.2
Average flock farm income per dozen	4.4	13.5
Average flock labor income per dozen	1.1	10.2

The above tabulations were compiled from individual cost records kept by farmers in Orange County under the direction of W. M. Cory, Assistant Farm Advisor.

TABLE 49

POULTRY COST ACCOUNT DATA, PLACER COUNTY—1927

	1927
Number of records	11
Total number hens in study	6,548
Average number hens per flock	595.3
Average number eggs per hen	143.0
Highest flock average: eggs per hen	169.0
Average cost per dozen for highest producing flock (cents)	33.5
Lowest flock average: eggs per hen	123.0
Average cost per dozen for lowest producing flock (cents)	37.1
Average per cent mortality all flocks	15.6
Highest flock: average per cent mortality	22.0
Lowest flock: average per cent mortality	7.4
 Average cost per hen	 <i>dollars</i>
Feed	2.43
Stock purchases	0.35
Decrease in inventory (stock) .....	.....
Labor	0.63
Water, taxes, insurance	0.06
Interest on investment (at 6 per cent)	0.20
Other overhead	0.33
Total	4.00
Average gross income per hen	4.18
Average net profit per hen	0.18
Average flock farm income per hen	1.00
Average flock labor income per hen	0.80
 Average cost per dozen	 <i>cents</i>
Feed	20.4
Stock purchases	3.0
Decrease in inventory (stock) .....	.....
Labor	5.3
Water, taxes, insurance	0.5
Interest on investment (at 6 per cent)	1.7
Other overhead	2.7
Total	33.6
Average gross income per dozen	35.1
Average net profit per dozen	1.5
Average flock farm income per dozen	8.4
Average flock labor income per dozen	6.7

The above tabulations were compiled from individual cost records kept by farmers in Placer County under the direction of R. D. McCallum, Farm Advisor.

TABLE 50

POULTRY COST ACCOUNT DATA, SACRAMENTO COUNTY—1927

	1927
Number of records	11
Total number hens in study	7,139
Average number hens per flock	649
Average number eggs per hen	155.0
Highest flock average: eggs per hen	186.0
Average cost per dozen for highest producing flock (cents)	19.7
Lowest flock average: eggs per hen	131.0
Average cost per dozen for lowest producing flock (cents)	33.9
Average per cent mortality all flocks	17.2
Highest flock: average per cent mortality	21.8
Lowest flock: average per cent mortality	10.7
Average cost per hen	<i>dollars</i>
Feed	1.92
Stock purchases	0.58
Decrease in inventory (stock) .....	.....
Labor	0.62
Water, taxes, insurance	0.06
Interest on investment (at 6 per cent)	0.26
Other overhead	0.24
Total	3.68
Average gross income per hen	4.03
Average net profit per hen	0.35
Average flock farm income per hen	1.23
Average flock labor income per hen	0.97
Average cost per dozen	<i>cents</i>
Feed	14.8
Stock purchases	4.5
Decrease in inventory (stock) .....	.....
Labor	4.8
Water, taxes, insurance	0.5
Interest on investment (at 6 per cent)	2.0
Other overhead	1.9
Total	28.5
Average gross income per dozen	31.2
Average net profit per dozen	2.7
Average flock farm income per dozen	9.5
Average flock labor income per dozen	7.5

The above tabulations were compiled from individual cost records kept by farmers in Sacramento County under the direction of E. L. Stanley, Farm Advisor.

TABLE 51

POULTRY COST ACCOUNT DATA, SAN JOAQUIN COUNTY—1925-1927

	1925	1926	1927
Number of records	18	20	24
Total number of hens in study	7,625	7,965	12,598
Average number hens per flock	423	398	525
Average number eggs per hen	151.0	149.0	151.0
Highest flock average: eggs per hen	181.0	172.0	199.0
Average cost per dozen for highest producing flock (cents)	36.0	28.4	19.7
Lowest flock average: eggs per hen	113.0	110.0	123.0
Average cost per dozen for lowest producing flock (cents)	40.2	34.2	40.2
Average per cent mortality all flocks	11.9	12.0	15.0
Highest flock: average per cent mortality	32.0	21.7	36.5
Lowest flock: average per cent mortality	5.0	3.4	4.2
Average cost per hen	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Feed	2.57	2.36	2.31
Stock purchases .....	.....	0.22	0.25
Decrease in inventory (stock)	0.42	.....	.....
Labor	0.79	0.79	0.90
Water, taxes, insurance	0.06	0.08	0.07
Interest on investment (at 6 per cent)	0.31	0.28	0.26
Other overhead .....	.....	0.28	0.17
Total	4.15	4.01	3.96
Average gross income per hen	4.82	4.89	4.12
Average net profit per hen	0.67	0.88	0.16
Average flock farm income per hen .....	.....	1.89	1.07
Average flock labor income per hen	1.90	1.62	0.81
Average cost per dozen	<i>cents</i>	<i>cents</i>	<i>cents</i>
Feed	20.4	19.0	18.3
Stock purchases .....	.....	1.8	2.0
Decrease in inventory (stock)	3.3	.....	.....
Labor	6.3	6.4	7.1
Water, taxes, insurance	0.5	0.6	0.6
Interest on investment (at 6 per cent)	2.4	2.3	2.1
Other overhead .....	.....	2.3	1.3
Total	32.9	32.4	31.4
Average gross income per dozen	38.2	39.4	32.7
Average net profit per dozen	5.3	7.0	1.3
Average flock farm income per dozen .....	.....	15.2	8.5
Average flock labor income per dozen	15.1	13.1	6.4

The above tabulations were compiled from individual cost records kept by farmers in San Joaquin County under the direction of W. O. Fleming, Assistant Farm Advisor.

TABLE 52

POULTRY COST ACCOUNT DATA, SANTA CRUZ COUNTY—1927

	1927
Number of records	6
Total number hens in study	6,328
Average number hens per flock	1,055
Average number eggs per hen	150.0
Highest flock average: eggs per hen	217.0
Average cost per dozen for highest producing flock (cents)	30.2
Lowest flock average: eggs per hen	131.0
Average cost per dozen for lowest producing flock (cents)	29.7
Average per cent mortality all flocks	25.0
Highest flock: average per cent mortality	44.2
Lowest flock: average per cent mortality	12.1
Average cost per hen	<i>dollars</i>
Feed	2.14
Stock purchases	0.08
Decrease in inventory (stock)	0.06
Labor	0.75
Water, taxes, insurance	0.06
Interest on investment (at 6 per cent)	0.20
Other overhead	0.14
Total	3.43
Average gross income per hen	3.79
Average net profit per hen	0.36
Average flock farm income per hen	1.30
Average flock labor income per hen	1.10
Average cost per dozen	<i>cents</i>
Feed	17.1
Stock purchases	0.6
Decrease in inventory (stock)	0.5
Labor	6.0
Water, taxes, insurance	0.5
Interest on investment (at 6 per cent)	1.6
Other overhead	1.1
Total	27.4
Average gross income per dozen	30.3
Average net profit per dozen	2.9
Average flock farm income per dozen	10.4
Average flock labor income per dozen	8.8

The above tabulations were compiled from individual cost records kept by farmers in Santa Cruz County under the direction of H. L. Washburn, Farm Advisor.

TABLE 53

POULTRY COST ACCOUNT DATA, SONOMA COUNTY—1925, 1927

	1925	1927
Number of records	38	52
Total number hens in study	62,730	119,198
Average number hens per flock	1,651	2,292
Average number eggs per hen	137.8	130.0
Highest flock average: eggs per hen	180.0	202.0
Average cost per dozen for highest producing flock (cents)	28.6	17.4
Lowest flock average: eggs per hen	113.0	97.0
Average cost per dozen for lowest producing flock (cents)	33.1	58.0
Average per cent mortality all flocks	20.1	28.2
Highest flock: average per cent mortality	33.9	57.3
Lowest flock: average per cent mortality	6.2	5.7
Average cost per hen	<i>dollars</i>	<i>dollars</i>
Feed	2.10	2.02
Stock purchases	0.61	0.39
Decrease in inventory (stock)	0.06	.....
Labor	0.74	0.69
Water, taxes, insurance	0.06	0.04
Interest on investment (at 6 per cent)	0.27	0.28
Other overhead	0.05	0.26
Total	3.89	3.68
Average gross income per hen	4.39	3.74
Average net profit per hen	0.50	0.06
Average flock farm income per hen	1.37	0.89
Average flock labor income per hen	1.10	0.61
Average cost per dozen	<i>cents</i>	<i>cents</i>
Feed	18.3	18.7
Stock purchases	5.3	3.6
Decrease in inventory (stock)	0.5	.....
Labor	6.4	6.4
Water, taxes, insurance	0.5	0.4
Interest on investment (at 6 per cent)	2.4	2.6
Other overhead	0.4	2.4
Total	33.8	34.1
Average gross income per dozen	38.2	34.6
Average net profit per dozen	4.4	0.5
Average flock farm income per dozen	11.9	8.2
Average flock labor income per dozen	9.6	5.6

The above tabulations were compiled from individual cost records kept by farmers in Sonoma County under the direction of H. H. von Lehe, Assistant Farm Advisor.

TABLE 54

POULTRY COST ACCOUNT DATA, TULARE COUNTY—1926—1927

	1926	1927
Number of records	15	28
Total number hens in study	13,155	21,262
Average number hens per flock	877	759
Average number eggs per hen	152.0	145.0
Highest flock average: eggs per hen	169.0	175.0
Average cost per dozen for highest producing flock (cents)	19.8	23.7
Lowest flock average: eggs per hen	125.0	71.0
Average cost per dozen for lowest producing flock (cents)	29.6	48.5
Average per cent mortality all flocks	15.2	13.3
Highest flock: average per cent mortality	33.0	36.7
Lowest flock: average per cent mortality	4.0	5.0
Average cost per hen	<i>dollars</i>	<i>dollars</i>
Feed	2.00	2.22
Stock purchases	0.16	0.23
Decrease in inventory (stock) .....	.....	0.07
Labor	0.63	0.78
Water, taxes, insurance	0.05	0.11
Interest on investment (at 6 per cent)	0.22	0.28
Other overhead	0.22	0.30
Total	3.28	3.99
Average gross income per hen	4.03	3.65
Average net profit per hen	0.75	—0.34
Average flock farm income per hen	1.50	0.48
Average flock labor income per hen	1.28	0.20
Average cost per dozen	<i>cents</i>	<i>cents</i>
Feed	15.8	18.4
Stock purchases	1.3	1.9
Decrease in inventory (stock) .....	.....	0.6
Labor	5.0	6.4
Water, taxes, insurance	0.4	0.9
Interest on investment (at 6 per cent)	1.7	2.3
Other overhead	1.7	2.5
Total	25.9	33.0
Average gross income per dozen	31.8	30.2
Average net profit per dozen	5.9	—2.8
Average flock farm income per dozen	11.9	4.0
Average flock labor income per dozen	10.1	1.7

The above tabulations were compiled from individual cost records kept by farmers in Tulare County under the direction of M. A. Lindsay, Assistant Farm Advisor.

TABLE 55

POULTRY COST ACCOUNT DATA, VENTURA COUNTY—1927

	1927
Number of records	11
Total number hens in study	17,959
Average number hens per flock	1,633
Average number eggs per hen	156.3
Highest flock average: eggs per hen	212.0
Average cost per dozen for highest producing flock (cents)	30.2
Lowest flock average: eggs per hen	96.0
Average cost per dozen for lowest producing flock (cents)	59.7
Average per cent mortality all flocks	18.1
Highest flock: average per cent mortality	21.7
Lowest flock: average per cent mortality	15.0
Average cost per hen	<i>dollars</i>
Feed	2.43
Stock purchases	0.34
Decrease in inventory (stock) .....	.....
Labor	0.92
Water, taxes, insurance	0.09
Interest on investment (at 6 per cent)	0.26
Other overhead	0.29
Total	4.33
Average gross income per hen	4.61
Average net profit per hen	0.28
Average flock farm income per hen	1.29
Average flock labor income per hen	1.03
Average cost per dozen	<i>cents</i>
Feed	18.7
Stock purchases	2.6
Decrease in inventory (stock) .....	.....
Labor	7.1
Water, taxes, insurance	0.7
Interest on investment (at 6 per cent)	2.0
Other overhead	2.2
Total	33.3
Average gross income per dozen	35.4
Average net profit per dozen	2.1
Average flock farm income per dozen	9.9
Average flock labor income per dozen	7.9

The above tabulations were compiled from individual cost records kept by farmers in Ventura County under the direction of S. A. Anderson, Assistant Farm Advisor.

TABLE 56

TURKEY COST ACCOUNT DATA, SAN BERNARDINO COUNTY—1927

	1927
Number of records	4
Total number of breeding hens	225
Average number breeding hens per flock	56
Average number eggs per hen	44
Total number of birds raised	3,182
Total pounds of meat raised	42,799.4
Average pounds meat per bird raised	13.5
Highest cost per pound of meat (cents)	34.6
Average income per pound of meat (cents)	54.2
Lowest cost per pound of meat (cents)	26.4
Average income per pound of meat (cents)	44.1
Average cost per bird raised	<i>dollars</i>
Feed	2.17
Stock purchases	0.28
Decrease in inventory (stock) .....	.....
Labor	0.96
Water, taxes, insurance	0.09
Interest on investment (at 6 per cent) and depreciation on buildings	0.46
Other overhead	0.25
Total	4.21
Average gross income per bird	6.58
Average net profit per bird	2.37
Average flock farm income per bird	2.99
Average flock labor income per bird	2.69
Average cost per pound of meat	<i>cents</i>
Feed	16.1
Stock purchases	2.1
Decrease in inventory (stock) .....	.....
Labor	7.1
Water, taxes, insurance	0.7
Interest on investment (at 6 per cent) and depreciation on buildings	3.4
Other overhead	1.8
Total	31.2
Average gross income per pound of meat	48.7
Average net profit per pound of meat	17.5
Average flock farm profit per pound of meat	22.1
Average flock labor income per pound of meat	19.9

The above tabulations were compiled from individual cost records kept by farmers in San Bernardino County under the direction of A. L. Campbell, Assistant Farm Advisor.

METHOD OF RETURNING DATA TO COOPERATORS

The material presented in tables 57 to 62 are a partial illustration of the method used in presenting cost and efficiency data in the various groups of farm commodities. The Gravenstein apple study from Sonoma County, the orange study from Orange County, the walnut study from Los Angeles County, the dairy study from Imperial County, and the poultry study from Sonoma County are used as examples.

It is important for the cooperator to know his costs definitely. This information becomes much more valuable when it can be compared with costs of various operations of other growers under similar conditions. The least efficient producer may be following practices that should be avoided. On the other hand, the more efficient producer may be following practices which are worthy of emulation. A comparison of the separate items that make up the total costs of production furnishes each operator with a clear picture of where he stands in the scale of costs. If his labor costs per acre or per ton are abnormally high, it is his problem to find the cause and if possible to correct it. The farm advisor attempts to help each cooperator to find the leaks in management practices and correct them. The farm advisor's discussion is based on a complete summary of the study in the producer's district, combined with data from his own enterprise, as shown in tables 57 to 62. Frequently the farm advisor leaves with the cooperator a written statement of suggested changes in management practices which will increase his efficiency of production. This method of procedure was followed in each of the studies reported in this circular.

TABLE 57

COMPARISON OF COST AND EFFICIENCY FACTORS IN GRAVENSTEIN APPLE PRODUCTION, SONOMA COUNTY, 1927. GROUPED ACCORDING TO NET PROFIT PER ACRE

	9 Lowest net profit	9 Highest net profit	Average all orchards	Your orchard No.
Acreage.....	9.5	8.0	9.7	.....
Age (years).....	17.0	18.0	17.3	.....
Per cent fancy.....	56.6	69.3	68.6	.....
Per cent C grade.....	4.4	5.9	5.8	.....
Per cent unclassified.....	3.3	2.7	1.2	.....
Per cent culls.....	35.7	22.1	24.4	.....
Yield per acre (packed boxes).....	66.9	395.0	212.9	.....
Gross returns per acre.....	\$59.46	\$466.41	\$242.31	.....
Cost per acre.....	\$127.68	\$210.33	\$146.86	.....
Net profit per acre.....	-\$68.22	\$256.08	\$95.45	.....
Selling price per box.....	\$0.89	\$1.18	\$1.14	.....
Cost per box.....	\$1.91	\$0.53	\$0.69	.....
Net profit pe. box.....	-\$1.02	\$0.65	\$0.45	.....
Labor costs per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Pruning.....	6.55	15.89	11.08	.....
Brush disposal.....	3.41	3.22	2.73	.....
Dormant spray.....	3.13	4.93	3.18	.....
Summer spray.....	7.32	5.84	5.51	.....
Plowing.....	3.04	3.12	3.32	.....
Cultivation.....	5.82	5.09	4.33	.....
Thinning.....	2.23	7.59	3.66	.....
Propping.....	0.59	2.13	1.62	.....
Picking.....	10.57	50.29	25.38	.....
Hauling.....	2.77	7.63	5.06	.....
Fertilization.....	1.17	1.84	1.44	.....
Miscellaneous.....	2.92	4.46	3.59	.....
Average total*	40.63	105.69	63.75	.....
Comparative total†	.....	.....	.....	.....
Material costs per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Dormant spray.....	4.29	7.36	5.34	.....
Summer spray.....	6.53	8.50	6.20	.....
Fertilization.....	1.71	1.87	2.95	.....
Miscellaneous.....	0.50	0.52	0.92	.....
Average total*	8.01	16.07	10.77	.....
Comparative total†	.....	.....	.....	.....

* The average totals shown in these tables are not totals of the above columns of figures. They are arrived at by dividing the total labor, material and other costs by the total number of acres in each group of that study. The average cost of irrigation, cultivation, spraying and other individual items of cost are based on the actual number of acres on which the operation was performed.

† The comparative total for each group of records is the sum of those cost items corresponding to the ones incurred by the individual cooperator making the comparison, and may differ with each separate case.

TABLE 57—(Continued)

	9 Lowest net profit	9 Highest net profit	Average all orchards	Your orchard No.
Overhead costs per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
General expenses.....	2 43	6.09	3.73	.....
County taxes.....	4 85	4 45	3.97	.....
Depreciation and interest on trees.....	43.91	43.09	37.31	.....
Depreciation and interest on improvements	2.07	1.84	2.14	.....
Depreciation and interest on equipment.....	8.45	13.83	8.74	.....
Interest on investment in land.....	17.33	19.27	16.45	.....
Average total*.....	79.04	88.57	72.34	.....
Comparative total†.....	.....	.....	.....	.....
Some factors measured on tonnage basis:	<i>cents per box</i>	<i>cents per box</i>	<i>cents per box</i>	<i>cts. per box</i>
Thinning.....	3 3	1.9	0.9	.....
Propping.....	0.9	0.5	0.5	.....
Picking.....	15 8	12.7	11.9	.....
Hauling.....	4.1	1.9	2.4	.....
Average total*.....	24.1	17.0	15.7	.....
Comparative total†.....	.....	.....	.....	.....

RECAPITULATION

Costs per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Labor.....	40.63	105.69	63.75	.....
Materials.....	8.01	16.07	10.77	.....
Cash overhead	7.28	11.54	7.70	.....
Other overhead.....	71.76	77.03	64.64	.....
Total.....	127.68	210.33	146.86	.....
Costs per box:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Labor.....	0.61	0.27	0.30	.....
Materials.....	0.12	0.04	0.05	.....
Cash overhead.....	0.11	0.03	0.04	.....
Other overhead.....	1.07	0.20	0.30	.....
Total.....	1.91	0.54	0.69	.....

* The average totals shown in these tables are not totals of the above columns of figures. They are arrived at by dividing the total labor, material and other costs by the total number of acres in each group of that study. The average cost of irrigation, cultivation, spraying and other individual items of cost are based on the actual number of acres on which the operation was performed.

† The comparative total for each group of records is the sum of those cost items corresponding to the ones incurred by the individual cooperator making the comparison, and may differ with each separate case.

TABLE 58

COMPARISON OF COST AND EFFICIENCY FACTORS IN ORANGE PRODUCTION, ORANGE COUNTY, 1927. GROUPED ACCORDING TO NET PROFIT PER ACRE

Items	Average 10 lowest net returns	Average 10 highest net returns	Average all (61) groves	Your grove No.
Acreage.....	12.3	9.5	9.8	.....
Age (years).....	14.0	20.0	16.0	.....
Per cent No. 1 fruit.....	40.0	71.1	58.2	.....
Per cent No. 2 fruit.....	37.5	22.2	29.8	.....
Per cent No. 3 fruit.....	12.3	1.4	4.4	.....
Per cent culls.....	10.3	5.3	7.6	.....
Returns per box No. 1.....	\$3.03	\$4.10	\$3.55	.....
Returns per box No. 2.....	\$2.44	\$3.25	\$2.89	.....
Returns per box No. 3.....	\$1.50	\$1.83	\$1.73	.....
Returns per box culls.....	\$0.54	\$0.52	\$0.45	.....
Number packed boxes per acre.....	138.0	360.0	217.0	.....
Number packed boxes per tree.....	1.9	5.2	3.0	.....
Gross income per acre.....	\$328.62	\$1331.41	\$655.55	.....
Total expense per acre.....	\$417.02	\$455.99	\$399.52	.....
Net return per acre.....	-\$88.40	\$875.42	\$256.03	.....
Labor cost per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Irrigation—preparation of land.....	5.54	4.58	4.54	.....
Irrigation—application of water.....	6.94	9.22	7.66	.....
Application of fertilizer.....	8.27	7.29	5.53	.....
Cover crops.....	2.92	2.65	1.94	.....
Fumigation.....	12.44	16.63	16.47	.....
Spraying.....	12.41	3.94	10.32	.....
Disease control.....	4.60	5.10	3.04	.....
Orchard heating.....	.....	7.93	6.37	.....
Windbreaks.....	.....	1.53	1.54	.....
Pruning.....	9.03	21.38	10.41	.....
Cultivation.....	19.44	18.43	16.11	.....
Picking fruit.....	25.07	40.99	28.33	.....
Hauling fruit.....	8.49	14.14	9.80	.....
Sweating.....	3.25	.....	1.74	.....
Miscellaneous.....	2.34	10.18	4.05	.....
Average total*.....	93.79	137.93	98.22	.....
Comparative total†.....	.....	.....	.....	.....
Material costs per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Irrigation.....	10.59	17.78	12.73	.....
Fertilizer.....	74.76	64.29	63.48	.....
Cover crops.....	3.73	0.93	3.89	.....
Fumigation.....	14.62	16.35	19.98	.....
Spraying.....	21.41	10.85	15.74	.....
Disease control.....	2.64	1.18	0.32	.....
Plowing and cultivation.....	0.12	.....	0.13	.....
Orchard heating.....	.....	.....	2.41	.....
Miscellaneous.....	0.56	2.73	2.39	.....
Average total*.....	96.39	91.43	88.04	.....
Comparative total†.....	.....	.....	.....	.....
Cash overhead per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
General overhead expense.....	13.39	13.06	9.31	.....
County taxes.....	27.69	36.15	30.97	.....
Average* and comparative total†.....	41.08	49.21	40.28	.....
All labor and cash expense (comparative)‡....	.....	.....	.....	.....

TABLE 58—(Continued)

Items	Average 10 lowest net returns	Average 10 highest net returns	Average all (61) groves	Your grove No.
	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Other overhead per acre:				
Interest and depreciation on trees.....	91.59	75.33	85.33	.....
Interest and depreciation on other improvements.....	8.23	8.61	8.11	.....
Interest and depreciation on equipment.....	3.35	12.70	6.40	.....
Interest on land investment.....	82.59	81.48	70.71	.....
Average* and comparative overhead†.....	185.76	178.12	170.55	.....
Average total all costs*.....	417.02	455.99	397.10	.....
Comparative total all costs†.....	.....	.....	.....	.....
Investment per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Trees.....	1002.77	739.52	901.71	.....
Improvements (not trees).....	62.18	73.95	64.87	.....
Equipment.....	18.08	58.38	25.69	.....
Land.....	1376.60	1358.04	1281.38	.....
Total investment.....	2459.63	2229.89	2273.65	.....
Labor and material cost per box:	<i>cents</i>	<i>cents</i>	<i>cents</i>	<i>cents</i>
Irrigation.....	16.3	8.7	11.2	.....
Fertilization.....	60.6	19.8	32.3	.....
Cover crop.....	4.8	0.9	2.6	.....
Fumigation.....	19.7	9.0	16.8	.....
Spraying.....	24.6	3.0	11.8	.....
Disease control.....	3.5	1.7	1.5	.....
Pruning.....	6.6	5.9	4.8	.....
Plowing and cultivation.....	14.3	5.1	9.2	.....
Harvesting.....	20.8	15.3	17.3	.....
Orchard heating.....	.....	2.2	4.0	.....
Miscellaneous.....	1.8	3.6	2.9	.....
Average total*.....	138.0	63.4	85.8	.....
Comparative total†.....	.....	.....	.....	.....
Cash overhead cost per box:	<i>cents</i>	<i>cents</i>	<i>cents</i>	<i>cents</i>
General overhead expense.....	9.7	3.6	4.3	.....
County taxes.....	20.2	10.0	14.2	.....
Average* and comparative total†.....	29.9	13.6	18.5	.....
All labor, material and cash expense (comparative)†.....	.....	.....	.....	.....
Other overhead expenses per box:	<i>cents</i>	<i>cents</i>	<i>cents</i>	<i>cents</i>
Interest and depreciation on trees.....	66.8	20.9	39.3	.....
Interest and depreciation on other improvements.....	6.0	2.3	3.7	.....
Interest and depreciation on equipment.....	2.5	3.5	2.9	.....
Interest on land investment.....	60.3	22.6	32.6	.....
Average* and comparative overhead†.....	135.6	49.3	78.5	.....
Average total all costs per box*.....	305.0	126.0	183.0	.....
Comparative total all costs per box†.....	.....	.....	.....	.....

* The average totals shown in these tables are not totals of the above columns of figures. They are arrived at by dividing the total labor, material and other costs by the total number of acres in each group of that study. The average cost of irrigation, cultivation, spraying and other individual items of cost are based on the actual number of acres on which the operation was performed.

† The comparative total for each group of records is the sum of those cost items corresponding to the ones incurred by the individual cooperator making the comparison, and may differ with each separate case.

‡ This is the sum of the comparative totals for labor, materials, and cash overhead for each group of farms.

TABLE 59

COMPARISON OF COST AND EFFICIENCY FACTORS IN PRODUCING WALNUTS, LOS ANGELES COUNTY, 1927. GROUPED ACCORDING TO YIELD PER ACRE

	8 Lowest yield per acre	11 Highest yield per acre	Average all groves	Your grove
Number of groves.....	8	11	28	.....
Average acreage.....	16.3	20.0	23.8	.....
Number of trees per acre.....	20.2	19.5	18.4	.....
Average age of trees.....	16.1	24.0	22.0	.....
Per cent seedling trees.....	53.0	65.7	66.3	.....
Per cent budded trees.....	47.0	34.3	33.7	.....
Yield: pounds walnuts per acre.....	1101	2434	1938	.....
Merchantable nuts (pounds).....	769	1789	1383	.....
Cull nuts (pounds).....	332	645	555	.....
Labor costs per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Cultivation.....	15.89	9.59	10.37	.....
Irrigation.....	5.56	5.93	6.21	.....
Pest control.....	4.10	7.12	5.38	.....
Disease control.....	2.74	2.40	1.56	.....
Pruning.....	4.41	2.63	3.29	.....
Brush disposal.....	8.52	1.38	1.81	.....
Harvesting.....	23.50	51.03	38.99	.....
Heating.....	.....	2.12	1.27	.....
Wiring and propping.....	.....	3.24	2.29	.....
Miscellaneous.....	1.31	2.27	1.56	.....
Average total*.....	50.78	78.82	66.26	.....
Comparative total†.....	.....	.....	.....	.....
Material costs per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Cultivation.....	0.43	0.08	0.18	.....
Irrigation.....	5.83	6.57	6.85	.....
Pest control.....	3.19	3.96	3.32	.....
Disease control.....	0.66	0.15	3.73	.....
Pruning.....	0.21	.....	0.36	.....
Brush disposal.....	.....	.....	0.48	.....
Harvesting.....	2.40	3.08	3.02	.....
Heating.....	.....	0.12	1.25	.....
Wiring and propping.....	.....	2.59	1.92	.....
Miscellaneous.....	9.45	1.02	1.94	.....
Average total*.....	10.68	11.95	11.69	.....
Comparative total†.....	.....	.....	.....	.....
Overhead costs per acre:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
General expense.....	3.07	4.53	3.90	.....
County taxes.....	19.42	23.42	20.88	.....
Depreciation and interest on trees.....	28.52	34.70	34.70	.....
Depreciation and interest on improvements.....	8.20	5.04	5.19	.....
Depreciation and interest on equipment.....	6.80	12.03	9.93	.....
Interest on investment in land.....	45.75	45.00	45.00	.....
Average* and comparative total†.....	111.76	124.72	119.60	.....

TABLE 59—(Continued)

RECAPITULATION

	8 Lowest yield per acre	11 Highest yield per acre	Average all groves	Your grove
	dollars	dollars	dollars	dollars
Costs per acre:				
Labor.....	50.91	78.82	66.26	.....
Materials.....	10.68	11.95	11.69	.....
Overhead.....	111.76	124.72	119.60	.....
Total.....	173.35	215.49	197.55	.....
Costs per pound:	cents	cents	cents	cents
Labor.....	4.6	3.2	3.4	.....
Materials.....	1.0	0.5	0.6	.....
Overhead.....	10.1	5.1	6.2	.....
Total.....	15.7	8.8	10.2	.....

* The average totals shown in these tables are not totals of the above columns of figures. They are arrived at by dividing the total labor, material and other costs by the total number of acres in each group of that study. The average cost of irrigation, cultivation, pest control and other individual items of cost are based on the actual number of acres on which the operation was performed.

† The comparative total for each group of records is the sum of those cost items corresponding to the ones incurred by the individual cooperator making the comparison and may differ with each separate case.

TABLE 60

WALNUT COST ACCOUNT STUDY, LOS ANGELES COUNTY, 1927. EXTREMES OF CULTIVATION PRACTICES SHOWING FOUR GROVES FOR COMPARISON WITH YOUR GROVES

Item	Grove No. 1	Grove No. 2	Grove No. 3	Grove No. 4	Your grove
Cost per acre.....	\$33.49.....	\$30.34.....	\$4.15.....	\$6.31.....	.....
Cost per pound.....	0.0296.....	0.0395.....	0.0029.....	0.0022.....	.....
Yield—pounds.....	1,130.5.....	768.1.....	1,448.8.....	2,840.5.....	.....
Age.....	14.....	7.....	15.....	40.....	.....
Variety.....	Seedling.....	Budded.....	Seedling.....	Seedling.....	.....
Soil type.....	Hvy. blk. loam	Med. silt loam	Sandy loam.....	Hvy. blk. loam nearly adobe.....	.....
Plow sole.....	7" to 12".....	Slight*.....	None.....	None.....	.....
Cultivation schedule:					
January.....		Plow-deep.....			
March.....	Plow-deep.....	D-D.....		Plow-shallow.....	
April.....	D-D cult.....	D-D.....	STH.....	SH.....	
May.....	Irr. cult.....	Irr. cult.....	WK-Irr.....		
June.....	Cult.....	D-D-SH-Irr.....	STH.....	Irr.....	
July.....	D-D Cult.....	D-D-SH-Irr.....	Irr.....	SH** DSH.....	
August.....	D-D cult.....	D-D-SH-Irr.....	Irr.-SH.....	Irr.-STH.....	
Number of plowings.....	1.....	1.....	0.....	1.....	
Number of diskings.....	3.....	5.....	0.....	1.....	
Number of cultivations.....	5.....	4.....	4.....	4.....	
Number of irrigations.....	1.....	4.....	3.....	2.....	
Penetration of water.....	Poor.....	Good.....	Good.....	Good.....	

Cult.—Cultivations other than disk, furrow, or plow.

D—Disk.

D-D—Double disk.

DSH—Disk with spike harrow attached.

SH—Spike harrow.

STH—Spring tooth harrow.

WK—Weed knife.

*—Soil will not pack into hard layer.

**—Spring toothed when top of ground dry—disking ten days later.

As with many other crops, walnut groves are frequently cultivated without beneficial results and sometimes with detrimental effect. The question is, where does cultivation cease and "irrigation" begin? Groves 3 and 4 probably had nearly an ideal cultivation schedule.

Reference to cultivation costs will show that general groupings by yield substantiate the tendencies shown by these extreme cases.

TABLE 61

COMPARISON OF COSTS AND EFFICIENCY FACTORS IN THE DAIRY INDUSTRY,
IMPERIAL COUNTY, 1927. GROUPED ACCORDING TO NET PROFIT PER COW

	5 Lowest net profit	5 Highest net profit	Average all dairies	Your dairy No.
Number of herds.....	5	5	15	.....
Average number of cows per herd.....	38.7	34.8	32.1	.....
Pounds milk per cow.....	6464.0	6681.0	6556.0	.....
Average test.....	4.02	4.27	4.14	.....
Pounds butterfat per cow.....	260.0	285.0	272.0	.....
Total receipts per farm.....	\$5917.73	\$6697.51	\$5560.16	.....
Total expenses per farm.....	\$5608.81	\$4490.81	\$4544.77	.....
Net profit per farm.....	\$308.92	\$2206.70	\$1015.39	.....
Farm income per farm.....	\$1502.39	\$3607.18	\$2277.35	.....
Labor income per farm.....	\$1072.46	\$3267.10	\$1909.57	.....
Total receipts per cow.....	\$152.95	\$192.40	\$173.40	.....
Total expenses per cow.....	\$144.96	\$129.01	\$141.73	.....
Net profit per cow.....	\$7.99	\$63.39	\$31.67	.....
Farm income per cow.....	\$38.83	\$103.65	\$71.03	.....
Labor income per cow.....	\$27.72	\$93.86	\$59.56	.....
Investment per cow:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Land.....	10.68	14.38	12.41	.....
Dairy buildings.....	23.14	30.85	20.86	.....
Dairy equipment.....	13.47	6.98	10.99	.....
All feeds.....	9.64	7.94	8.18	.....
Fertilizer.....	0.23	0.66	0.56	.....
Dairy stock.....	130.46	164.21	142.18	.....
Average total*.....	182.90	205.44	187.63	.....
Comparative total†.....	.....	.....	.....	.....
Income per cow:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Butterfat.....	104.57	83.11	95.82	.....
Whole milk.....	2.52	50.18	26.34	.....
Skim milk.....	5.97	6.62	5.98	.....
Dairy stock sold.....	21.54	9.74	16.43	.....
Increase inventory stock.....	14.76	36.26	23.96	.....
Miscellaneous sales.....	1.85	1.69	1.48	.....
Dairy products home use.....	1.55	4.80	3.26	.....
Dairy stock home use.....	0.19	.....	0.08	.....
Total.....	152.95	192.40	173.40	.....

* The average totals shown in these tables are not totals of the above columns of figures. They are arrived at by dividing the total investment in land, buildings, dairy equipment, feed, fertilizer and dairy stock by the number of cows in each group of that study. The average cost of the above items are based on the actual number of cows contained in the herds which had these investments; for instance, renters would not have a land investment charge.

† The comparative total for each group of records is the sum of those cost items corresponding to the ones incurred by the individual cooperator making the comparison and may differ with each separate case.

TABLE 61—(Continued)

	5 Lowest net profit	5 Highest net profit	Average all dairies	Your dairy No.
Portion of income from various sources:	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
Butterfat.....	68.5	43.2	55.2	.....
Whole milk.....	1.6	26.1	15.2	.....
Skim milk.....	3.9	3.4	3.4	.....
Dairy stock sold.....	14.1	5.0	9.5	.....
Increase inventory stock.....	9.6	18.9	13.7	.....
Miscellaneous sales.....	1.2	0.9	0.9	.....
Dairy products home use.....	1.0	2.5	2.0	.....
Dairy stock home use.....	0.1	.....	0.1	.....
Total.....	100.0	100.0	100.0	.....
Expense per cow:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Hay.....	20.93	14.13	17.36	.....
Concentrates.....	2.23	7.67	4.63	.....
Silage.....	4.98	1.20	2.43	.....
Pasture.....	40.46	38.41	42.35	.....
Dairy stock bought.....	9.52	10.11	11.24	.....
Decrease inventory stock.....	.....	.....	.....	.....
Hired labor.....	20.38	5.86	11.91	.....
Family labor.....	19.73	30.46	27.89	.....
Miscellaneous.....	10.50	5.88	8.80	.....
Depreciation buildings and equipment.....	5.12	2.65	3.65	.....
Interest on investment (at 6 per cent).....	11.11	12.64	11.47	.....
Total.....	144.96	129.01	141.73	.....
Portion of expenses for various items:	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
Hay.....	14.4	10.9	12.3	.....
Concentrates.....	1.5	6.0	3.3	.....
Silage.....	3.4	0.9	1.7	.....
Green feed.....	.....	.....	.....	.....
Pasture.....	27.9	29.8	29.8	.....
Dairy stock bought.....	6.6	7.8	7.9	.....
Decrease inventory stock.....	.....	.....	.....	.....
Hired labor.....	14.1	4.5	8.4	.....
Family labor.....	13.6	23.6	19.7	.....
Miscellaneous.....	7.3	4.6	6.2	.....
Depreciation buildings and equipment.....	3.5	2.1	2.6	.....
Interest on investment (at 6 per cent).....	7.7	9.8	8.1	.....
Total.....	100.0	100.0	100.0	.....
Cost of production per cow:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Feed.....	68.60	61.41	66.77	.....
Stock.....	9.52	10.11	11.24	.....
Decrease inventory stock.....	.....	.....	.....	.....
Labor.....	40.11	36.32	39.80	.....
Miscellaneous.....	10.50	5.88	8.80	.....
Depreciation.....	5.12	2.65	3.65	.....
Interest on investment (at 6 per cent).....	11.11	12.64	11.47	.....
Total.....	144.96	129.01	141.73	.....
Gross income.....	152.95	192.40	173.40	.....
Net profit.....	7.99	63.39	31.67	.....
Farm income.....	38.83	103.65	71.03	.....
Labor income.....	27.72	93.86	59.56	.....

TABLE 61—(Continued)

	5 Lowest net profit	5 Highest net profit	Average all dairies	Your dairy No.
	<i>cents</i>	<i>cents</i>	<i>cents</i>	<i>cents</i>
Cost of production per pound butterfat:				
Feed.....	26.4	21.6	24.5	.....
Stock.....	3.7	3.5	4.1	.....
Decrease inventory stock.....	.....	.....	.....	.....
Labor.....	15.4	12.7	14.6	.....
Miscellaneous.....	4.0	2.1	3.2	.....
Depreciation.....	2.0	0.9	1.3	.....
Interest on investment (at 6 per cent).....	4.3	4.4	4.2	.....
Total.....	55.8	45.2	52.1	.....
Gross income.....	58.8	67.5	63.7	.....
Net profit.....	3.0	22.3	11.6	.....
Farm income.....	14.9	36.4	26.1	.....
Labor income.....	10.7	32.9	21.9	.....
Some other management factors:				
Average price butterfat creamery (cents).....	47.4	48.9	48.0	.....
Average price butterfat whole milk (cents).....	53.1	58.7	61.3	.....
Average price all butterfat (cents).....	47.5	52.2	50.3	.....
Price skim milk per cwt. (cents).....	15.4	15.2	15.2	.....
Pounds hay per cow.....	4950	3581	4145	.....
Pounds concentrates per cow.....	144	451	280	.....
Pounds silage per cow.....	3263	609	1532	.....
Price hay per ton.....	\$8.45	\$8.31	\$8.41	.....
Price concentrates per cwt.....	\$1.55	\$1.77	\$1.51	.....
Price silage per ton.....	\$3.05	\$3.94	\$3.18	.....
Price pasture per animal per month.....	\$2.54	\$2.06	\$2.34	.....
Hours labor per cow.....	101	83	99	.....
Wages per hour earned by owner*.....	\$0.60	\$1.37	\$0.89	.....
Interest earned on investment, per cent.....	10.4	37.0	23.0	.....
Pounds butterfat to pay expenses.....	243.0	212.6	234.0	.....
Cost per pound to produce butterfat (cents).....	38.7	26.2	34.5	.....

* This figure is the total labor income divided by the number of hours spent on the dairy enterprise by the owner.

TABLE 62

COMPARISON OF COST AND EFFICIENCY FACTORS IN EGG PRODUCTION, SONOMA COUNTY, 1927. GROUPED ACCORDING TO NET PROFIT PER HEN

	13 Lowest net profit	13 Highest net profit	Average all flocks	Your flock
Number of flocks.....	13	13	52	.....
Number of hens per flock.....	1889	2268	2293	.....
Number of eggs per hen.....	129.4	137.5	131.5	.....
Per cent production.....	35.4	37.6	36.0	.....
Per cent mortality.....	30.6	26.1	28.7	.....
Per cent culled.....	48.3	14.5	32.1	.....
Per cent replacement*.....	66.6	38.6	56.0	.....
Per cent added†.....	51.6	55.0	50.8	.....
Per cent pullets.....	51.2	52.7	50.3	.....
Pounds grain per hen.....	44.7	41.0	41.0	.....
Cost per hen.....	\$1.01	\$0.92	\$0.92	.....
Pounds mash per hen.....	41.8	40.1	37.0	.....
Cost per hen.....	\$1.05	\$1.02	\$0.92	.....
Per cent market eggs.....	93.5	91.7	91.4	.....
Average price market eggs (cents).....	28.0	29.1	28.5	.....
Per cent hatching eggs.....	6.5	8.3	8.6	.....
Average price hatching eggs (cents).....	39.8	40.5	43.2	.....
Per cent No. 1 eggs.....	71.0	71.8	71.2	.....
Per cent No. 2 eggs.....	24.5	23.6	24.4	.....
Per cent No. 3 eggs.....	4.5	4.6	4.4	.....
Average investment per hen:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Land.....	1.26	0.91	1.06	.....
Buildings and fences.....	1.98	1.38	1.63	.....
Equipment, tools, etc.....	0.76	0.53	0.44	.....
Supplies, insecticides.....	0.03	0.02	0.02	.....
Feed, shell, and grit.....	0.08	0.05	0.06	.....
Poultry stock.....	1.45	1.39	1.38	.....
Total.....	5.56	4.28	4.59	.....
Income per hen:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Market eggs.....	2.72	3.02	2.79	.....
Hatching eggs.....	0.27	0.38	0.40	.....
Poultry stock sold.....	0.76	0.34	0.47	.....
Miscellaneous.....	0.05	0.04	0.04	.....
Eggs consumed.....	0.02	0.02	0.02	.....
Poultry consumed.....	.....	.....	0.01	.....
Increase in inventory (stock).....	.....	0.30	0.04	.....
Total.....	3.82	4.10	3.77	.....
Portion of income from various sources:	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
Market eggs.....	71.3	73.7	74.1	.....
Hatching eggs.....	7.1	9.2	10.6	.....
Poultry stock sold.....	19.8	8.2	12.5	.....
Miscellaneous.....	1.2	0.9	1.1	.....
Eggs consumed.....	0.6	0.6	0.6	.....
Poultry consumed.....	.....	.....	0.0	.....
Increase inventory (stock).....	.....	7.4	1.1	.....
Total.....	100.0	100.0	100.0	.....

* This figure is obtained by dividing the number of hens died and sold during the year by the number of laying hens at the beginning of the year.

† This figure is obtained by dividing the number of hens added during the year by the number of laying hens in the flock at the beginning of the year.

TABLE 62—(Continued)

	13 Lowest net profit <i>dollars</i>	13 Highest net profit <i>dollars</i>	Average all flocks <i>dollars</i>	Your flock <i>dollars</i>
Expenses per hen:				
Feed.....	2.16	1.99	2.04	.....
Stock bought.....	0.71	0.22	0.39	.....
Miscellaneous.....	0.19	0.09	0.13	.....
Hired labor.....	0.22	0.04	0.15	.....
Family labor.....	0.75	0.49	0.55	.....
Water, taxes, insurance.....	0.06	0.04	0.04	.....
Interest on investment (at 6 per cent).....	0.34	0.26	0.29	.....
Decrease in inventory (stock).....	0.08	.....	.....	.....
Decrease in inventory (depreciation).....	0.16	0.12	0.13	.....
Total.....	4.67	3.25	3.72	.....
Portion of expenses for various items:	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>	<i>per cent</i>
Feed.....	46.2	61.2	55.0	.....
Stock bought.....	15.3	6.9	10.0	.....
Miscellaneous.....	4.0	2.7	3.0	.....
Hired labor.....	4.6	1.3	4.0	.....
Family labor.....	16.1	15.0	15.0	.....
Water, taxes, insurance.....	1.2	1.3	1.0	.....
Interest on investment (at 6 per cent).....	7.4	8.0	8.0	.....
Decrease inventory (stock).....	1.8	.....	.....	.....
Decrease inventory (depreciation).....	3.4	3.6	4.0	.....
Total.....	100.0	100.0	100.0	.....
Cost of production per hen:	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>
Feed costs.....	2.16	1.99	2.04	.....
Stock bought.....	0.71	0.22	0.39	.....
Decrease in stock.....	0.08	.....	.....	.....
Labor.....	0.97	0.53	0.70	.....
Water, taxes, insurance.....	0.06	0.04	0.04	.....
Interest on investment (at 6 per cent).....	0.34	0.26	0.29	.....
Other overhead.....	0.35	0.21	0.26	.....
Total.....	4.67	3.25	3.72	.....
Gross income.....	3.82	4.10	3.77	.....
Net profit.....	-0.85	0.85	0.05	.....
Flock farm income.....	0.25	1.59	0.89	.....
Flock labor income.....	-0.10	1.33	0.60	.....
Cost of production per dozen eggs:	<i>cents</i>	<i>cents</i>	<i>cents</i>	<i>cents</i>
Feed costs.....	20.0	17.4	18.6	.....
Stock bought.....	6.6	1.9	3.6	.....
Decrease in stock.....	0.7	.....	.....	.....
Labor.....	9.0	4.6	6.4	.....
Water, taxes, insurance.....	0.6	0.4	0.4	.....
Interest on investment (at 6 per cent).....	3.2	2.3	2.6	.....
Other overhead.....	3.2	1.8	2.4	.....
Total.....	43.3	28.4	34.0	.....
Gross income.....	35.4	35.8	34.4	.....
Net profit.....	-7.9	7.4	0.4	.....
Flock farm income.....	2.3	13.9	8.1	.....
Flock labor income.....	-0.9	11.6	5.5	.....

